

Designs for 24-vertex snarks

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Abstract

The design spectrum problem is solved for the thirty-eight 24-vertex non-trivial snarks.

1 Introduction

Let G be a simple graph without isolated vertices. If the edge set of a simple graph K can be partitioned into edge sets of graphs each isomorphic to G , we say that there exists a *decomposition* of K into G . In the case where K is the complete graph K_n we refer to the decomposition as a G *design* of order n . The *spectrum* of G is the set of positive integers n for which there exists a G design of order n . We refer the reader to the survey article of Adams, Bryant and Buchanan, [2] and, for more up to date results, the Web site maintained by Bryant and McCourt, [3].

A *snark* is a connected, bridgeless 3-regular graph with chromatic index 4. However, a snark is usually regarded as trivial (or reducible) if it has girth less than 5 or if it has three edges the deletion of which results in a disconnected graph each of whose components is non-trivial (as a graph).

The spectra for non-trivial snarks of up to 22 vertices have been successfully determined, as follows.

1. The smallest non-trivial snark is the 10-vertex Petersen graph for which designs of order n exist if and only if $n \equiv 1$ or $10 \pmod{15}$, [1].
2. There are no non-trivial snarks on 12, 14 or 16 vertices.
3. There are two non-trivial snarks on 18 vertices, namely the $(1, 1)$ - and $(1, 2)$ -Blanuša snarks. For each of them, designs of order n exist if and only if $n \equiv 1 \pmod{27}$, [5].

4. For each of the six 20-vertex non-trivial snarks (including the flower snark J5), designs of order n exist if and only if $n \equiv 1, 16, 25, 40 \pmod{60}$, $n \neq 16$, [5].
5. For each of the twenty 22-vertex non-trivial snarks (including the two Loupekine snarks), designs of order n exist if and only if $n \equiv 1$ or $22 \pmod{33}$, [5].

The purpose of this paper is to extend these results to 24-vertex non-trivial snarks of which there are precisely 38, [4]. We prove the following.

Theorem 1.1 *Designs of order n exist for each of the thirty-eight non-trivial snarks on 24 vertices if and only if $n \equiv 1$ or $64 \pmod{72}$.*

The methods use to obtain results like Theorems 1.1 are explained in [5], to which the reader should regard this paper as a sequel. The main tool is [5, Proposition 1.8], repeated here for convenience as Proposition 1.1.

Proposition 1.1 *Let G be a 3-regular graph on 24 vertices. Suppose there exist G designs of order 64, 73, 136 and 145. Suppose also that there exist decompositions into G of the complete multipartite graphs $K_{12,12,12}$, $K_{24,24,15}$, $K_{72,72,63}$, $K_{24,24,24,24}$ and $K_{24,24,24,21}$. Then there exists a G design of order n if and only if $n \equiv 1$ or $64 \pmod{72}$.*

Proof. See [5]. □

To prove Theorem 1.1 it is sufficient, therefore, to construct the four designs and five multipartite graph decompositions required by Proposition 1.1 for each of the 38 non-trivial snarks. To save space the details of the constructions are given only for designs of order 136, which, in the author's opinion, were by far the most difficult to obtain. The details of the remaining constructions are given in the Appendix, which is present only in the full version of this paper, available by request from the author. The decompositions were obtained and checked by computer programs in the same manner as those of [5].

2 The 38 non-trivial snarks on 24 vertices

The thirty-eight non-trivial snarks on 24 vertices are represented by ordered 24-tuples of vertices: $(1, 2, \dots, 24)_{G_1}, (1, 2, \dots, 24)_{G_2}, \dots, (1, 2, \dots, 24)_{G_{38}}$. Their edge sets, as appearing in Royale's list, [6], are respectively

G1: $\{\{1, 2\}, \{1, 3\}, \{1, 4\}, \{2, 5\}, \{2, 6\}, \{3, 7\}, \{3, 8\}, \{4, 9\}, \{4, 10\}, \{5, 7\}, \{5, 9\}, \{6, 8\}, \{6, 11\}, \{7, 12\}, \{8, 13\}, \{9, 14\}, \{10, 11\}, \{10, 12\},$

$\{21, 24\}, \{22, 23\}\}$,

G36: $\{\{1, 2\}, \{1, 3\}, \{1, 4\}, \{2, 5\}, \{2, 6\}, \{3, 7\}, \{3, 8\}, \{4, 9\}, \{4, 10\}, \{5, 7\}, \{5, 9\}, \{6, 11\}, \{6, 12\}, \{7, 10\}, \{8, 13\}, \{8, 14\}, \{9, 15\}, \{10, 16\}, \{11, 16\}, \{11, 17\}, \{12, 18\}, \{12, 19\}, \{13, 15\}, \{13, 18\}, \{14, 17\}, \{14, 20\}, \{15, 20\}, \{16, 21\}, \{17, 22\}, \{18, 23\}, \{19, 22\}, \{19, 24\}, \{20, 24\}, \{21, 23\}, \{21, 24\}, \{22, 23\}\}$,

G37: $\{\{1, 2\}, \{1, 3\}, \{1, 4\}, \{2, 5\}, \{2, 6\}, \{3, 7\}, \{3, 8\}, \{4, 9\}, \{4, 10\}, \{5, 7\}, \{5, 9\}, \{6, 11\}, \{6, 12\}, \{7, 13\}, \{8, 14\}, \{8, 15\}, \{9, 14\}, \{10, 16\}, \{10, 17\}, \{11, 16\}, \{11, 18\}, \{12, 19\}, \{12, 20\}, \{13, 18\}, \{13, 21\}, \{14, 22\}, \{15, 19\}, \{15, 23\}, \{16, 21\}, \{17, 18\}, \{17, 23\}, \{19, 24\}, \{20, 22\}, \{20, 23\}, \{21, 24\}, \{22, 24\}\}$ and

G38: $\{\{1, 2\}, \{1, 3\}, \{1, 4\}, \{2, 5\}, \{2, 6\}, \{3, 7\}, \{3, 8\}, \{4, 9\}, \{4, 10\}, \{5, 7\}, \{5, 9\}, \{6, 11\}, \{6, 12\}, \{7, 13\}, \{8, 14\}, \{8, 15\}, \{9, 14\}, \{10, 16\}, \{10, 17\}, \{11, 16\}, \{11, 18\}, \{12, 19\}, \{12, 20\}, \{13, 18\}, \{13, 21\}, \{14, 22\}, \{15, 19\}, \{15, 23\}, \{16, 21\}, \{17, 18\}, \{17, 24\}, \{19, 24\}, \{20, 22\}, \{20, 23\}, \{21, 23\}, \{22, 24\}\}$.

Lemma 2.1 *There exist a design of order 136 for each of the thirty-eight non-trivial 24-vertex snarks.*

Proof. Let the vertex set of K_{136} be $Z_{135} \cup \{\infty\}$. The decompositions consist of

$(\infty, 1, 96, 44, 95, 99, 21, 54, 102, 3, 90, 11,$
 $130, 94, 5, 133, 120, 31, 2, 25, 77, 116, 98, 9)_{G1},$
 $(33, 35, 88, 18, 101, 9, 132, 34, 58, 126, 42, 114,$
 $120, 39, 72, 119, 107, 28, 70, 105, 12, 133, 56, 106)_{G1},$
 $(29, 13, 28, 12, 27, 84, 31, 37, 56, 95, 46, 133,$
 $122, 10, 114, 121, 130, 60, 3, 4, 85, 14, 41, 119)_{G1},$
 $(120, 47, 86, 95, 25, 14, 80, 29, 104, 58, 26, 7,$
 $76, 28, 97, 121, 41, 33, 18, 46, 70, 63, 133, 4)_{G1},$
 $(132, 70, 3, 96, 55, 5, 24, 60, 59, 130, 26, 56,$
 $37, 76, 98, 16, 111, 102, 109, 22, 79, 47, 63, 74)_{G1},$
 $(97, 84, 54, 95, 83, 35, 119, 77, 41, 9, 12, 65,$
 $57, 120, 55, 42, 126, 50, 53, 62, 123, 63, 98, 51)_{G1},$
 $(2, 102, 26, 48, 105, 20, 56, 50, 59, 114, 22, 45,$
 $80, 24, 9, 98, 116, 77, 29, 11, 74, 62, 113, 122)_{G1},$
 $(\infty, 71, 112, 54, 34, 92, 74, 91, 27, 13, 99, 46,$
 $107, 115, 123, 121, 97, 25, 19, 47, 31, 51, 106, 14)_{G2},$
 $(116, 84, 89, 26, 70, 52, 113, 75, 125, 123, 122, 82,$
 $132, 81, 95, 43, 78, 32, 97, 13, 62, 20, 83, 115)_{G2},$
 $(30, 93, 125, 4, 59, 85, 79, 15, 78, 23, 0, 81,$
 $126, 106, 46, 36, 82, 72, 99, 103, 100, 77, 43, 41)_{G2},$

(89, 126, 98, 31, 28, 105, 95, 10, 22, 16, 110, 77,
 61, 86, 107, 106, 133, 60, 14, 96, 101, 3, 68, 79) $_{G_2}$,
 (98, 49, 63, 78, 25, 76, 67, 60, 117, 30, 19, 70,
 22, 58, 20, 6, 105, 120, 59, 126, 111, 83, 3, 38) $_{G_2}$,
 (131, 57, 125, 42, 87, 59, 96, 119, 54, 29, 123, 21,
 51, 84, 12, 62, 120, 38, 45, 128, 56, 53, 36, 50) $_{G_2}$,
 (44, 90, 56, 122, 26, 77, 41, 27, 111, 62, 60, 117,
 87, 98, 50, 48, 2, 83, 21, 108, 80, 78, 9, 14) $_{G_2}$,
 (∞ , 31, 33, 86, 82, 70, 32, 55, 90, 95, 1, 21,
 115, 68, 16, 2, 13, 91, 19, 73, 39, 111, 45, 134) $_{G_3}$,
 (107, 50, 31, 72, 78, 116, 33, 48, 42, 12, 91, 30,
 90, 112, 59, 18, 13, 80, 122, 32, 17, 98, 11, 58) $_{G_3}$,
 (38, 82, 85, 67, 95, 128, 78, 112, 50, 97, 116, 96,
 132, 13, 101, 55, 36, 16, 93, 83, 104, 12, 76, 66) $_{G_3}$,
 (92, 68, 119, 3, 76, 104, 105, 60, 44, 85, 54, 32,
 125, 78, 72, 45, 8, 86, 71, 12, 34, 65, 33, 102) $_{G_3}$,
 (29, 59, 126, 91, 44, 94, 128, 42, 77, 80, 103, 70,
 119, 24, 9, 114, 111, 33, 10, 0, 92, 130, 32, 58) $_{G_3}$,
 (35, 88, 118, 1, 21, 24, 97, 73, 69, 100, 112, 93,
 36, 117, 22, 45, 82, 85, 70, 127, 34, 60, 124, 106) $_{G_3}$,
 (1, 60, 36, 79, 97, 64, 40, 10, 131, 25, 111, 30,
 31, 49, 15, 76, 67, 90, 101, 75, 115, 22, 112, 19) $_{G_3}$,
 (∞ , 75, 70, 68, 60, 122, 6, 33, 35, 109, 71, 48,
 91, 111, 13, 65, 22, 63, 121, 118, 42, 7, 47, 126) $_{G_4}$,
 (7, 83, 59, 128, 76, 43, 22, 102, 14, 71, 21, 124,
 8, 129, 72, 98, 5, 132, 52, 125, 39, 110, 95, 97) $_{G_4}$,
 (79, 81, 129, 16, 52, 40, 29, 109, 69, 98, 118, 56,
 67, 47, 37, 87, 48, 63, 116, 44, 21, 26, 50, 131) $_{G_4}$,
 (108, 81, 122, 131, 105, 11, 91, 50, 95, 67, 20, 82,
 117, 26, 17, 75, 128, 73, 89, 107, 106, 66, 96, 45) $_{G_4}$,
 (62, 91, 38, 64, 95, 83, 20, 73, 126, 65, 117, 3,
 17, 90, 70, 30, 33, 85, 130, 109, 96, 81, 58, 69) $_{G_4}$,
 (127, 95, 52, 91, 24, 121, 6, 70, 94, 79, 4, 66,
 38, 51, 115, 19, 1, 102, 64, 84, 18, 67, 0, 21) $_{G_4}$,
 (7, 4, 121, 39, 124, 64, 109, 85, 127, 99, 13, 25,
 97, 78, 24, 45, 117, 118, 71, 15, 0, 102, 70, 103) $_{G_4}$,
 (∞ , 93, 53, 76, 43, 0, 113, 49, 24, 2, 34, 54,
 64, 77, 6, 82, 28, 21, 125, 117, 96, 122, 87, 71) $_{G_5}$,
 (2, 105, 34, 106, 112, 78, 114, 68, 10, 24, 79, 63,
 23, 72, 52, 82, 45, 32, 64, 39, 116, 1, 18, 43) $_{G_5}$,
 (125, 24, 118, 77, 86, 16, 92, 6, 84, 78, 131, 35,
 76, 23, 18, 4, 117, 52, 95, 60, 130, 80, 29, 128) $_{G_5}$,

(46, 112, 67, 127, 26, 106, 114, 131, 128, 110, 61, 101,
 59, 43, 91, 14, 16, 19, 40, 84, 111, 7, 86, 93)_{G5},
 (120, 57, 101, 16, 0, 52, 106, 115, 109, 133, 107, 8,
 55, 87, 76, 104, 82, 75, 39, 80, 93, 38, 119, 72)_{G5},
 (76, 98, 51, 38, 71, 83, 45, 68, 50, 65, 104, 93,
 106, 81, 44, 82, 128, 117, 21, 57, 111, 105, 6, 87)_{G5},
 (5, 17, 33, 99, 32, 29, 59, 123, 9, 71, 11, 41,
 129, 20, 53, 42, 18, 125, 36, 90, 51, 120, 21, 84)_{G5},
 (∞ , 64, 33, 83, 116, 34, 85, 45, 111, 82, 28, 109,
 37, 0, 50, 35, 86, 110, 70, 68, 115, 40, 69, 56)_{G6},
 (11, 89, 129, 50, 90, 60, 94, 3, 115, 122, 39, 40,
 88, 92, 102, 133, 33, 101, 66, 32, 46, 100, 112, 99)_{G6},
 (55, 11, 50, 92, 35, 24, 53, 101, 132, 118, 64, 47,
 43, 122, 67, 96, 108, 23, 111, 103, 134, 4, 37, 15)_{G6},
 (80, 125, 14, 101, 50, 36, 69, 64, 132, 8, 13, 129,
 130, 115, 15, 68, 112, 106, 74, 58, 34, 71, 44, 96)_{G6},
 (8, 25, 72, 60, 97, 39, 1, 115, 63, 76, 74, 27,
 23, 7, 18, 9, 96, 55, 14, 31, 51, 128, 130, 36)_{G6},
 (67, 46, 92, 32, 38, 25, 126, 4, 123, 80, 50, 30,
 131, 84, 65, 0, 39, 78, 21, 66, 69, 72, 105, 117)_{G6},
 (5, 52, 92, 129, 17, 44, 127, 0, 60, 95, 33, 80,
 108, 54, 117, 114, 78, 96, 30, 45, 111, 56, 8, 3)_{G6},
 (∞ , 123, 16, 92, 100, 30, 29, 69, 132, 57, 27, 67,
 121, 18, 95, 3, 77, 60, 90, 23, 61, 2, 66, 12)_{G7},
 (131, 5, 95, 72, 13, 10, 56, 49, 57, 3, 119, 48,
 66, 11, 89, 32, 86, 16, 46, 74, 22, 114, 88, 4)_{G7},
 (80, 6, 101, 23, 62, 35, 91, 82, 0, 134, 68, 92,
 48, 26, 119, 123, 61, 76, 4, 53, 50, 130, 75, 20)_{G7},
 (34, 95, 67, 83, 91, 51, 85, 88, 42, 89, 65, 39,
 115, 61, 82, 5, 118, 53, 133, 57, 71, 69, 19, 60)_{G7},
 (89, 24, 101, 121, 103, 30, 83, 11, 15, 91, 62, 1,
 65, 98, 31, 25, 93, 37, 28, 21, 22, 102, 33, 132)_{G7},
 (98, 101, 95, 4, 84, 104, 48, 10, 3, 91, 87, 132,
 61, 111, 69, 51, 109, 115, 9, 93, 36, 0, 58, 117)_{G7},
 (1, 55, 27, 3, 54, 75, 121, 7, 130, 105, 49, 70,
 66, 80, 103, 69, 25, 117, 33, 63, 16, 42, 110, 109)_{G7},
 (∞ , 40, 32, 105, 117, 59, 76, 93, 77, 68, 104, 37,
 5, 85, 128, 18, 4, 34, 79, 110, 65, 64, 51, 126)_{G8},
 (57, 36, 114, 81, 4, 55, 19, 66, 112, 10, 46, 17,
 40, 31, 113, 84, 125, 134, 86, 117, 129, 95, 9, 7)_{G8},
 (20, 37, 120, 112, 122, 129, 56, 3, 74, 0, 6, 28,
 75, 30, 52, 73, 72, 79, 71, 10, 83, 53, 63, 110)_{G8},

(54, 18, 123, 88, 74, 128, 81, 69, 4, 8, 51, 110,
 17, 40, 62, 5, 28, 103, 120, 85, 50, 57, 27, 119)_{G8},
 (20, 31, 82, 26, 105, 7, 103, 87, 52, 111, 0, 3,
 36, 39, 6, 70, 48, 121, 28, 42, 41, 86, 118, 50)_{G8},
 (90, 129, 51, 77, 116, 33, 119, 20, 74, 25, 59, 82,
 83, 89, 19, 22, 94, 67, 88, 73, 104, 124, 62, 31)_{G8},
 (2, 85, 95, 11, 28, 89, 100, 98, 32, 7, 110, 130,
 35, 41, 70, 26, 124, 9, 66, 113, 92, 82, 77, 134)_{G8},
 (∞ , 23, 123, 79, 87, 12, 80, 58, 38, 90, 134, 109,
 42, 15, 50, 122, 29, 37, 132, 121, 82, 104, 99, 1)_{G9},
 (85, 50, 125, 73, 47, 78, 16, 96, 133, 120, 25, 48,
 59, 71, 60, 83, 12, 23, 84, 69, 75, 22, 40, 91)_{G9},
 (3, 128, 52, 36, 83, 27, 58, 7, 50, 80, 61, 60,
 53, 18, 6, 59, 120, 133, 11, 35, 69, 126, 12, 107)_{G9},
 (84, 48, 90, 134, 87, 45, 16, 21, 127, 46, 53, 7,
 59, 64, 56, 31, 129, 119, 70, 8, 43, 0, 6, 52)_{G9},
 (36, 83, 90, 94, 78, 35, 133, 34, 37, 3, 117, 108,
 24, 40, 45, 109, 86, 107, 104, 116, 110, 22, 43, 38)_{G9},
 (86, 67, 60, 58, 119, 71, 34, 44, 22, 38, 19, 53,
 18, 56, 65, 104, 14, 2, 127, 109, 107, 70, 10, 28)_{G9},
 (1, 103, 34, 31, 50, 80, 64, 133, 73, 57, 52, 83,
 125, 107, 41, 106, 56, 40, 130, 121, 122, 68, 70, 88)_{G9},
 (∞ , 17, 37, 72, 38, 19, 104, 108, 74, 117, 122, 48,
 119, 93, 106, 92, 64, 42, 68, 15, 107, 88, 44, 84)_{G10},
 (31, 55, 121, 113, 26, 51, 22, 108, 27, 117, 48, 53,
 95, 10, 88, 41, 103, 40, 46, 47, 24, 3, 36, 101)_{G10},
 (132, 71, 12, 108, 9, 85, 106, 120, 98, 134, 93, 45,
 61, 89, 63, 6, 59, 94, 56, 127, 119, 100, 126, 104)_{G10},
 (16, 101, 92, 23, 72, 68, 35, 60, 103, 66, 65, 57,
 32, 69, 117, 78, 30, 95, 58, 122, 106, 4, 111, 76)_{G10},
 (133, 21, 48, 16, 0, 93, 9, 49, 36, 112, 53, 25,
 105, 20, 28, 114, 59, 119, 125, 124, 113, 91, 37, 72)_{G10},
 (3, 106, 28, 46, 11, 81, 19, 49, 103, 58, 124, 94,
 112, 109, 115, 67, 61, 29, 97, 52, 37, 14, 131, 89)_{G10},
 (1, 43, 16, 44, 35, 31, 73, 68, 62, 4, 83, 52,
 25, 127, 46, 38, 56, 94, 104, 37, 112, 71, 131, 69)_{G10},
 (∞ , 8, 99, 25, 127, 54, 124, 24, 9, 38, 74, 122,
 2, 62, 53, 66, 101, 47, 79, 44, 5, 109, 51, 4)_{G11},
 (20, 54, 93, 44, 43, 48, 125, 32, 21, 124, 100, 33,
 7, 112, 88, 39, 131, 83, 92, 41, 1, 130, 109, 82)_{G11},
 (69, 65, 31, 28, 129, 128, 106, 38, 57, 97, 13, 132,
 29, 113, 35, 107, 55, 119, 58, 34, 110, 4, 60, 102)_{G11},

(45, 91, 72, 62, 19, 105, 64, 13, 76, 48, 66, 8,
 89, 113, 102, 36, 67, 100, 97, 70, 1, 9, 46, 63) $_{G11}$,
 (97, 57, 49, 86, 62, 52, 34, 58, 80, 82, 79, 69,
 78, 105, 48, 63, 132, 87, 26, 127, 131, 114, 66, 95) $_{G11}$,
 (130, 27, 95, 62, 29, 60, 105, 28, 97, 33, 11, 116,
 128, 129, 117, 84, 44, 77, 93, 63, 51, 74, 35, 120) $_{G11}$,
 (0, 59, 77, 78, 126, 108, 26, 66, 71, 80, 39, 96,
 131, 81, 29, 12, 6, 41, 47, 92, 48, 15, 14, 99) $_{G11}$,
 (∞ , 6, 19, 47, 82, 37, 55, 86, 93, 98, 40, 88,
 26, 10, 85, 73, 56, 35, 42, 90, 71, 87, 22, 21) $_{G12}$,
 (130, 134, 50, 119, 3, 103, 76, 98, 7, 28, 84, 133,
 71, 104, 60, 58, 116, 99, 36, 111, 23, 124, 17, 57) $_{G12}$,
 (58, 29, 80, 131, 59, 88, 47, 72, 87, 107, 24, 120,
 90, 11, 122, 67, 81, 130, 127, 8, 56, 43, 55, 14) $_{G12}$,
 (119, 23, 109, 42, 120, 95, 84, 25, 126, 35, 113, 125,
 64, 38, 96, 127, 0, 116, 102, 16, 15, 39, 22, 105) $_{G12}$,
 (52, 98, 87, 59, 101, 32, 44, 115, 22, 106, 42, 96,
 27, 51, 15, 65, 9, 41, 99, 57, 111, 72, 74, 62) $_{G12}$,
 (8, 75, 7, 22, 84, 70, 16, 9, 133, 64, 56, 15,
 18, 19, 55, 82, 123, 76, 61, 86, 21, 85, 67, 100) $_{G12}$,
 (1, 6, 129, 96, 132, 13, 130, 79, 46, 4, 34, 49,
 25, 115, 90, 9, 16, 40, 66, 67, 109, 73, 127, 108) $_{G12}$,
 (∞ , 125, 103, 69, 70, 64, 82, 106, 24, 20, 81, 123,
 47, 66, 77, 33, 15, 49, 115, 40, 45, 16, 61, 75) $_{G13}$,
 (109, 91, 70, 124, 77, 55, 118, 117, 71, 20, 129, 49,
 45, 110, 112, 121, 98, 35, 99, 68, 114, 130, 0, 43) $_{G13}$,
 (8, 48, 10, 64, 80, 128, 14, 78, 53, 116, 37, 90,
 85, 38, 51, 106, 66, 39, 79, 84, 60, 41, 1, 32) $_{G13}$,
 (14, 31, 13, 51, 116, 54, 69, 122, 42, 113, 68, 103,
 58, 119, 12, 96, 93, 23, 118, 7, 89, 129, 134, 87) $_{G13}$,
 (54, 102, 48, 1, 122, 127, 52, 105, 103, 93, 29, 3,
 104, 114, 34, 73, 38, 7, 60, 51, 76, 35, 86, 84) $_{G13}$,
 (58, 21, 104, 49, 72, 96, 123, 125, 132, 11, 12, 25,
 117, 5, 113, 92, 128, 20, 34, 98, 43, 122, 80, 38) $_{G13}$,
 (128, 14, 41, 40, 116, 62, 53, 122, 35, 8, 20, 17,
 59, 83, 119, 46, 134, 95, 23, 91, 11, 54, 129, 100) $_{G13}$,
 (∞ , 124, 62, 102, 110, 112, 34, 70, 15, 93, 86, 103,
 89, 12, 7, 10, 98, 90, 8, 75, 37, 117, 104, 97) $_{G14}$,
 (54, 13, 19, 133, 108, 124, 93, 88, 85, 118, 38, 28,
 8, 128, 34, 5, 33, 94, 4, 77, 114, 16, 134, 42) $_{G14}$,
 (54, 120, 1, 72, 56, 18, 76, 22, 45, 78, 85, 77,
 53, 64, 49, 87, 36, 67, 113, 106, 74, 28, 24, 117) $_{G14}$,

(85, 44, 52, 75, 127, 132, 95, 74, 24, 13, 9, 134,
 96, 64, 62, 1, 59, 26, 33, 91, 48, 89, 69, 116)_{G14},
 (56, 67, 0, 24, 13, 96, 132, 4, 120, 101, 10, 127,
 65, 63, 28, 70, 66, 11, 134, 53, 36, 126, 98, 102)_{G14},
 (10, 98, 47, 15, 131, 29, 71, 68, 8, 38, 45, 24,
 125, 20, 3, 66, 110, 134, 26, 32, 59, 22, 41, 27)_{G14},
 (5, 29, 26, 52, 41, 104, 83, 77, 57, 89, 20, 108,
 53, 101, 71, 78, 11, 68, 66, 36, 62, 131, 96, 2)_{G14},
 (∞ , 112, 90, 29, 49, 24, 116, 74, 127, 134, 5, 25,
 34, 124, 1, 77, 2, 119, 56, 125, 89, 13, 78, 132)_{G15},
 (11, 19, 4, 118, 5, 131, 119, 69, 60, 21, 38, 1,
 9, 51, 54, 92, 71, 61, 66, 13, 126, 48, 134, 94)_{G15},
 (47, 4, 121, 20, 10, 12, 78, 17, 35, 24, 88, 1,
 8, 114, 98, 18, 108, 96, 28, 118, 90, 80, 40, 77)_{G15},
 (28, 134, 24, 132, 88, 102, 63, 34, 127, 12, 79, 120,
 49, 2, 76, 78, 133, 16, 117, 58, 112, 103, 43, 77)_{G15},
 (121, 18, 15, 68, 91, 110, 92, 13, 125, 54, 127, 88,
 130, 108, 53, 51, 83, 9, 48, 96, 81, 11, 12, 75)_{G15},
 (97, 61, 48, 42, 121, 1, 72, 88, 66, 125, 81, 76,
 75, 110, 36, 40, 26, 29, 80, 27, 33, 62, 119, 113)_{G15},
 (1, 100, 123, 96, 93, 51, 41, 77, 11, 5, 27, 53,
 23, 110, 3, 107, 56, 47, 32, 131, 83, 116, 122, 71)_{G15},
 (∞ , 77, 30, 61, 108, 51, 14, 37, 58, 60, 27, 102,
 0, 117, 46, 126, 91, 28, 103, 74, 17, 70, 15, 118)_{G16},
 (40, 73, 110, 11, 61, 4, 16, 88, 92, 116, 134, 59,
 69, 21, 106, 71, 120, 36, 35, 103, 14, 28, 52, 83)_{G16},
 (68, 11, 16, 17, 53, 8, 98, 12, 112, 2, 9, 63,
 124, 110, 88, 15, 93, 30, 61, 77, 23, 95, 62, 105)_{G16},
 (83, 87, 107, 39, 82, 66, 34, 30, 95, 51, 93, 80,
 17, 27, 118, 44, 74, 8, 126, 28, 16, 124, 106, 111)_{G16},
 (105, 60, 62, 116, 0, 41, 54, 24, 57, 15, 29, 20,
 106, 80, 76, 117, 120, 36, 53, 48, 82, 16, 78, 46)_{G16},
 (29, 128, 56, 1, 85, 68, 36, 116, 27, 7, 41, 32,
 73, 127, 100, 21, 13, 92, 109, 55, 67, 126, 25, 4)_{G16},
 (5, 97, 112, 115, 48, 43, 106, 121, 22, 134, 21, 73,
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 120, 100, 128, 75, 31, 89, 117, 78, 2, 99, 4, 48)_{G17},
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 15, 52, 81, 97, 23, 91, 124, 37, 47, 74, 120, 99)_{G17},
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 87, 93, 120, 97, 18, 37, 32, 39, 1, 8, 17, 72)_{G17},

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 85, 78, 13, 38, 109, 120, 66, 83, 122, 80, 130, 92)_{G17},
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 18, 46, 48, 107, 120, 13, 65, 1, 109, 103, 112, 71)_{G17},
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 52, 28, 98, 125, 115, 134, 26, 10, 56, 128, 82, 4)_{G17},
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 7, 110, 94, 61, 37, 35, 124, 22, 28, 125, 50, 118)_{G17},
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 40, 79, 56, 104, 42, 35, 47, 50, 112, 59, 124, 126)_{G18},
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 117, 114, 13, 24, 58, 7, 108, 106, 52, 96, 118, 74)_{G18},
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 124, 44, 11, 67, 82, 116, 113, 58, 48, 91, 4, 63)_{G19},
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 16, 60, 132, 2, 134, 117, 10, 115, 67, 53, 108, 68)_{G19},
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 89, 7, 98, 101, 104, 34, 30, 27, 63, 62, 46, 47)_{G19},
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 22, 14, 49, 97, 61, 7, 103, 34, 29, 31, 9, 63)_{G19},
 (49, 56, 120, 6, 41, 12, 122, 16, 101, 17, 109, 69,
 124, 11, 89, 8, 47, 73, 20, 50, 71, 77, 28, 23)_{G19},
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 51, 88, 78, 48, 121, 120, 21, 102, 16, 45, 96, 18)_{G19},
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 129, 78, 123, 47, 48, 55, 19, 98, 121, 0, 124, 66)_{G19},
 (∞ , 2, 52, 0, 66, 95, 87, 17, 63, 118, 80, 48,
 53, 31, 78, 89, 21, 115, 75, 132, 125, 74, 85, 42)_{G20},
 (78, 90, 27, 37, 84, 95, 106, 3, 9, 49, 50, 36,
 17, 29, 0, 10, 61, 30, 75, 121, 94, 113, 8, 2)_{G20},
 (0, 56, 124, 32, 110, 90, 44, 65, 93, 102, 81, 25,
 40, 26, 1, 128, 91, 88, 6, 99, 119, 41, 97, 92)_{G20},

(43, 0, 63, 62, 116, 16, 107, 47, 25, 49, 75, 122,
 88, 52, 67, 13, 58, 65, 15, 64, 103, 132, 4, 45) $_{G20}$,
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 49, 92, 35, 95, 73, 131, 22, 77, 8, 26, 20, 110) $_{G20}$,
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 127, 124, 113, 54, 49, 33, 3, 9, 91, 55, 42, 95) $_{G21}$,
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 85, 69, 75, 112, 74, 20, 9, 14, 35, 76, 24, 56) $_{G21}$,
 (48, 127, 131, 64, 76, 44, 87, 56, 9, 90, 14, 73,
 37, 78, 46, 35, 75, 15, 68, 20, 60, 107, 12, 39) $_{G21}$,
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 44, 93, 73, 14, 45, 13, 70, 43, 88, 114, 47, 83) $_{G21}$,
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 16, 37, 33, 53, 83, 19, 25, 59, 2, 4, 32, 47) $_{G21}$,
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 17, 110, 37, 62, 86, 88, 116, 103, 97, 113, 80, 94) $_{G21}$,
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 42, 123, 84, 124, 50, 93, 125, 109, 26, 4, 17, 39) $_{G22}$,
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 133, 93, 32, 43, 125, 61, 105, 47, 127, 68, 108, 41) $_{G22}$,
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 72, 70, 88, 52, 0, 121, 42, 24, 20, 69, 99, 50) $_{G22}$,
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 121, 30, 123, 93, 133, 55, 131, 3, 50, 45, 119, 40) $_{G22}$,
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 56, 112, 116, 65, 49, 106, 89, 134, 119, 74, 11, 7) $_{G22}$,
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 71, 117, 88, 91, 41, 4, 89, 61, 64, 131, 122, 80) $_{G22}$,
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 129, 39, 30, 123, 57, 106, 93, 83, 82, 79, 60, 112) $_{G23}$,
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 73, 118, 112, 69, 68, 72, 98, 22, 111, 103, 129, 64) $_{G23}$,

(112, 95, 25, 121, 29, 71, 105, 116, 78, 1, 39, 22,
 73, 104, 134, 77, 49, 40, 52, 51, 119, 98, 108, 61) $_{G23}$,
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 62, 86, 127, 82, 56, 112, 134, 113, 29, 114, 84, 32) $_{G23}$,
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 44, 50, 123, 20, 131, 101, 87, 107, 42, 36, 60, 6) $_{G23}$,
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 18, 17, 27, 81, 99, 96, 111, 97, 59, 35, 126, 24) $_{G23}$,
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 62, 53, 49, 101, 32, 15, 30, 52, 84, 47, 120, 12) $_{G24}$,
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 59, 78, 48, 46, 67, 125, 134, 112, 91, 83, 105, 3) $_{G24}$,
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 108, 99, 59, 7, 90, 29, 127, 132, 87, 39, 57, 41) $_{G24}$,
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 106, 98, 6, 81, 70, 2, 130, 5, 43, 97, 123, 26) $_{G24}$,
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 100, 101, 56, 85, 19, 83, 48, 74, 87, 2, 11, 17) $_{G24}$,
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 131, 33, 114, 122, 128, 32, 111, 96, 54, 57, 119, 0) $_{G24}$,
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 (∞ , 68, 108, 127, 24, 55, 134, 11, 115, 126, 0, 96,
 45, 33, 114, 118, 121, 28, 73, 2, 72, 21, 97, 6) $_{G25}$,
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 3, 126, 100, 5, 44, 30, 133, 73, 134, 97, 4, 88) $_{G25}$,
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 12, 115, 83, 81, 72, 53, 11, 5, 120, 44, 50, 62) $_{G25}$,
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 133, 47, 134, 101, 51, 17, 18, 108, 49, 67, 16, 6) $_{G25}$,
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 30, 86, 134, 2, 43, 109, 22, 81, 26, 74, 31, 131) $_{G25}$,
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 95, 10, 77, 2, 86, 1, 62, 128, 11, 44, 134, 49) $_{G25}$,
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 97, 44, 59, 110, 45, 49, 74, 82, 95, 118, 41, 26) $_{G25}$,
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 67, 87, 17, 36, 13, 38, 69, 60, 28, 39, 23, 75) $_{G26}$,
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 128, 86, 47, 15, 90, 114, 60, 106, 43, 80, 61, 49) $_{G26}$,

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 49, 63, 130, 88, 36, 3, 70, 103, 101, 95, 122, 23)_{G26},
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 59, 61, 34, 42, 41, 44, 43, 5, 108, 80, 113, 9)_{G26},
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 83, 101, 72, 131, 93, 123, 80, 62, 114, 57, 0, 45)_{G26},
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 105, 129, 116, 130, 124, 97, 126, 128, 14, 122, 24, 83)_{G27},
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 84, 35, 68, 53, 99, 77, 0, 134, 123, 113, 54, 109)_{G27},
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 64, 57, 117, 1, 61, 113, 118, 13, 35, 30, 125, 16)_{G28},
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 53, 67, 102, 50, 32, 6, 51, 112, 35, 86, 5, 61)_{G28},
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 33, 81, 35, 52, 10, 58, 27, 49, 74, 79, 96, 40)_{G28},
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 82, 67, 59, 121, 33, 130, 30, 107, 110, 52, 24, 131)_{G28},
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 77, 93, 86, 61, 30, 125, 8, 32, 20, 107, 81, 51)_{G28},
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 92, 26, 72, 14, 85, 39, 5, 132, 101, 131, 68, 29)_{G28},
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 57, 115, 35, 118, 28, 77, 50, 7, 131, 36, 119, 126)_{G29},
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 51, 72, 2, 57, 108, 18, 132, 3, 82, 102, 76, 4)_{G29},
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 97, 84, 19, 3, 40, 109, 91, 112, 52, 94, 43, 0)_{G29},
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 34, 45, 3, 10, 27, 130, 73, 49, 42, 25, 51, 1)_{G29},
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 102, 3, 107, 16, 105, 112, 89, 26, 76, 117, 92, 49)_{G30},
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 69, 126, 2, 98, 34, 76, 8, 103, 131, 92, 61, 47)_{G30},
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 63, 103, 111, 18, 86, 67, 120, 71, 22, 77, 118, 43)_{G30},
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 133, 75, 54, 93, 51, 67, 18, 45, 38, 88, 99, 114)_{G30},
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 60, 67, 36, 87, 21, 74, 131, 54, 129, 55, 132, 37)_{G30},
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 96, 56, 98, 66, 120, 71, 23, 116, 44, 30, 92, 87)_{G30},
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 45, 131, 17, 113, 68, 5, 83, 39, 75, 110, 126, 59)_{G30},
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 132, 63, 120, 74, 33, 129, 82, 98, 113, 36, 20, 84)_{G31},
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 109, 76, 121, 71, 10, 56, 8, 77, 72, 64, 58, 115)_{G31},
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 124, 46, 70, 105, 114, 51, 99, 120, 23, 108, 72, 45)_{G31},
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 73, 17, 35, 83, 52, 91, 72, 45, 43, 0, 102, 20)_{G31},
 (134, 50, 75, 52, 45, 120, 33, 108, 129, 104, 21, 0,
 115, 118, 61, 5, 11, 37, 23, 31, 96, 76, 49, 131)_{G31},
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 131, 4, 46, 122, 97, 20, 71, 118, 109, 70, 86, 91)_{G31},
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 94, 124, 88, 44, 100, 131, 121, 101, 46, 71, 82, 22)_{G31},
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 10, 123, 64, 31, 9, 48, 2, 77, 40, 88, 7, 86)_{G32},
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 115, 96, 33, 107, 52, 92, 41, 87, 85, 95, 68, 121)_{G32},
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 81, 99, 38, 20, 44, 0, 5, 3, 132, 122, 84, 98)_{G32},
 (87, 63, 83, 36, 116, 52, 90, 81, 56, 86, 18, 8,
 95, 14, 35, 38, 62, 2, 89, 68, 82, 69, 48, 93)_{G32},
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 95, 11, 132, 66, 101, 126, 74, 102, 15, 75, 35, 68)_{G32},
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 98, 3, 127, 88, 89, 28, 129, 85, 11, 22, 23, 67)_{G33},
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 66, 40, 95, 52, 110, 129, 56, 10, 67, 116, 21, 134)_{G33},
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 16, 26, 3, 64, 72, 37, 130, 34, 84, 80, 110, 61)_{G33},
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 33, 120, 92, 54, 76, 32, 91, 5, 35, 64, 128, 104)_{G33},
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 118, 37, 32, 47, 71, 55, 70, 127, 62, 17, 67, 65)_{G33},
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 83, 52, 6, 54, 133, 76, 94, 46, 97, 123, 48, 35)_{G34},
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 134, 10, 46, 16, 35, 65, 56, 111, 120, 82, 92, 13)_{G34},
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 64, 85, 39, 9, 70, 33, 43, 93, 21, 6, 14, 30)_{G34},
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 83, 114, 119, 23, 111, 75, 44, 0, 128, 90, 96, 134)_{G34},
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 42, 17, 68, 117, 50, 131, 27, 74, 9, 30, 39, 44)_{G34},
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 94, 76, 51, 79, 89, 30, 82, 93, 13, 128, 12, 113)_{G35},
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 45, 87, 67, 122, 69, 33, 21, 75, 42, 24, 97, 8)_{G35},
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 47, 52, 115, 88, 93, 77, 41, 54, 72, 55, 87, 112)_{G35},

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 81, 74, 24, 41, 32, 23, 82, 45, 4, 111, 88, 34)_{G35},
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 114, 45, 105, 69, 12, 44, 9, 23, 99, 50, 66, 116)_{G35},
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 26, 132, 97, 111, 1, 32, 5, 80, 98, 105, 114, 107)_{G36},
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 91, 123, 96, 12, 101, 35, 125, 45, 62, 93, 88, 102)_{G36},
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 13, 90, 26, 19, 36, 103, 78, 98, 47, 37, 87, 80)_{G37},
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 127, 43, 94, 83, 76, 32, 112, 92, 34, 74, 19, 71)_{G37},
 (130, 51, 49, 103, 29, 39, 0, 12, 128, 92, 26, 57,
 63, 78, 133, 40, 20, 5, 64, 11, 127, 13, 90, 72)_{G37},
 (27, 40, 133, 6, 128, 64, 49, 34, 53, 30, 60, 44,
 125, 57, 96, 0, 70, 108, 124, 69, 119, 37, 62, 15)_{G37},
 (75, 47, 26, 81, 25, 84, 27, 3, 114, 70, 122, 40,
 112, 97, 64, 80, 18, 77, 55, 17, 131, 34, 99, 119)_{G37},
 (24, 82, 39, 9, 29, 48, 97, 54, 134, 67, 38, 79,
 58, 88, 85, 34, 14, 125, 118, 47, 116, 104, 101, 50)_{G37},
 (96, 130, 127, 86, 134, 41, 31, 8, 56, 110, 32, 118,
 2, 47, 35, 64, 14, 71, 89, 16, 68, 74, 122, 98)_{G37}
 and
 (∞ , 12, 46, 92, 123, 2, 67, 77, 91, 116, 33, 76,
 3, 58, 113, 70, 125, 7, 100, 114, 63, 20, 131, 22)_{G38},
 (108, 111, 17, 69, 5, 82, 80, 62, 46, 124, 53, 13,
 58, 96, 76, 133, 114, 19, 8, 38, 105, 3, 121, 132)_{G38},

(70, 134, 24, 34, 129, 108, 96, 85, 104, 42, 120, 32,
 83, 74, 12, 109, 23, 76, 88, 113, 55, 133, 90, 118)_{G38},
 (131, 47, 54, 89, 113, 108, 81, 13, 105, 96, 22, 23,
 27, 100, 17, 130, 116, 36, 29, 31, 7, 74, 119, 78)_{G38},
 (133, 83, 130, 8, 118, 98, 55, 111, 56, 47, 49, 7,
 72, 19, 65, 31, 124, 102, 117, 1, 73, 123, 3, 40)_{G38},
 (57, 93, 56, 128, 5, 23, 83, 134, 126, 36, 21, 80,
 104, 42, 39, 0, 35, 105, 24, 9, 107, 78, 129, 38)_{G38},
 (131, 39, 75, 60, 126, 90, 47, 123, 38, 113, 45, 42,
 84, 108, 95, 5, 0, 98, 132, 89, 2, 87, 116, 66)_{G38}
 under the action of the mapping $\infty \mapsto \infty$, $x \mapsto x + 3 \pmod{135}$ for the
 first five graphs in each design, and $x \mapsto x + 9 \pmod{135}$ for the last two.

□

Lemma 2.2 *There exist designs of order 64, 73 and 145 for each of the thirty-eight 24-vertex non-trivial snarks.*

Proof. The decompositions are given in the Appendix. □

Lemma 2.3 *There exist decompositions of the complete multipartite graphs $K_{12,12,12}$, $K_{24,24,15}$, $K_{72,72,63}$, $K_{24,24,24,24}$ and $K_{24,24,24,21}$ for each of the thirty-eight 24-vertex non-trivial snarks.*

Proof. The decompositions are given in the Appendix. □

Theorem 1.1 follows from Lemmas 2.1, 2.2 and 2.3, and Proposition 1.1.

References

- [1] P. Adams and D. E. Bryant, The spectrum problem for the Petersen graph, *J. Graph Theory* **22** (1996), 175–180.
- [2] P. Adams, D. E. Bryant and M. Buchanan, A survey on the existence of G -designs, *J. Combin. Des.* **16** (2008), 373–410.
- [3] D. E. Bryant, T. A. McCourt, Existence results for G -designs, <http://wiki.smp.uq.edu.au/G-designs/>.
- [4] G. Brinkmann, J. Goedgebeur, J. Hägglund and K. Markström, Generation and properties of snarks, <http://arxiv.org/abs/1206.6690>.
- [5] A. D. Forbes, Snark Designs, *Utilitas Math.*, to appear.
- [6] G. Royale, Cubic Graphs, <http://staffhome.ecm.uwa.edu.au/~00013890/remote/cubics/#snarks>.

A Proof of Lemma 2.2

Proof of Lemma 2.2. Recall that the lemma asserts the existence of designs of order 64, 73 and 145 for each of the thirty-eight 24-vertex non-trivial snarks.

Let the vertex set of K_{64} be $Z_{63} \cup \{\infty\}$. The decompositions consist of

- $(\infty, 53, 7, 45, 29, 21, 19, 59, 46, 47, 33, 24,$
 $5, 28, 11, 6, 8, 14, 58, 17, 2, 9, 43, 50)_{G_1},$
- $(58, 17, 51, 53, 13, 60, 7, 43, 9, 52, 32, 20,$
 $30, 24, 45, 62, 28, 0, 4, 15, 2, 31, 59, 36)_{G_1},$
- $(11, 56, 62, 49, 37, 5, 9, 17, 6, 18, 15, 61,$
 $54, 16, 41, 23, 0, 48, 22, 30, 33, 40, 13, 10)_{G_1},$
- $(25, 4, 61, 44, 42, 28, 7, 37, 51, 19, 49, 33,$
 $10, 21, 16, 30, 43, 47, 40, 27, 3, 1, 54, 57)_{G_1},$
- $(\infty, 20, 51, 16, 38, 50, 22, 35, 12, 46, 15, 44,$
 $1, 24, 57, 37, 40, 3, 48, 28, 58, 55, 4, 33)_{G_2},$
- $(26, 27, 29, 15, 55, 19, 38, 33, 47, 21, 45, 24,$
 $14, 10, 6, 62, 48, 30, 59, 20, 51, 31, 32, 8)_{G_2},$
- $(22, 50, 15, 24, 56, 44, 51, 31, 37, 17, 19, 11,$
 $8, 47, 49, 25, 43, 23, 46, 4, 41, 53, 30, 61)_{G_2},$
- $(43, 62, 11, 36, 23, 56, 18, 16, 0, 49, 28, 34,$
 $19, 61, 47, 21, 59, 58, 4, 48, 10, 46, 14, 53)_{G_2},$
- $(\infty, 8, 48, 16, 49, 9, 18, 10, 55, 1, 3, 28,$
 $50, 56, 26, 7, 2, 31, 13, 59, 40, 54, 33, 43)_{G_3},$
- $(2, 51, 52, 58, 48, 26, 39, 24, 4, 13, 16, 10,$
 $61, 40, 18, 33, 29, 56, 11, 44, 3, 45, 23, 6)_{G_3},$
- $(25, 8, 17, 41, 27, 62, 9, 45, 0, 50, 3, 5,$
 $29, 23, 13, 44, 36, 55, 47, 33, 59, 15, 26, 38)_{G_3},$
- $(56, 17, 27, 15, 6, 44, 49, 7, 23, 42, 60, 2,$
 $48, 50, 38, 32, 29, 21, 57, 39, 46, 3, 62, 11)_{G_3},$
- $(\infty, 43, 17, 24, 45, 42, 29, 30, 0, 27, 52, 34,$
 $8, 48, 35, 1, 41, 54, 61, 5, 7, 31, 56, 55)_{G_4},$
- $(3, 57, 38, 26, 40, 62, 19, 29, 51, 10, 41, 17,$
 $23, 16, 56, 14, 24, 34, 52, 0, 21, 11, 61, 49)_{G_4},$
- $(41, 42, 4, 19, 38, 55, 12, 47, 1, 27, 40, 25,$
 $18, 60, 6, 36, 62, 29, 17, 30, 52, 32, 7, 51)_{G_4},$
- $(13, 35, 31, 41, 54, 55, 24, 12, 61, 9, 36, 4,$
 $6, 57, 52, 30, 59, 17, 33, 21, 27, 37, 48, 2)_{G_4},$
- $(\infty, 46, 36, 41, 56, 11, 9, 42, 2, 38, 33, 22,$
 $43, 19, 4, 58, 27, 21, 18, 10, 48, 8, 23, 59)_{G_5},$

$(4, 44, 36, 56, 15, 57, 12, 31, 60, 35, 9, 29,$
 $11, 16, 42, 19, 39, 8, 30, 7, 53, 10, 52, 0)_{G5},$
 $(18, 22, 1, 61, 35, 42, 5, 46, 62, 25, 51, 50,$
 $54, 0, 60, 43, 17, 28, 23, 2, 49, 58, 59, 53)_{G5},$
 $(30, 13, 21, 34, 19, 38, 49, 1, 52, 4, 39, 31,$
 $8, 59, 61, 2, 53, 46, 29, 32, 16, 20, 47, 10)_{G5},$
 $(\infty, 24, 52, 8, 38, 33, 0, 16, 39, 60, 27, 41,$
 $10, 5, 9, 22, 3, 59, 36, 18, 6, 53, 51, 37)_{G6},$
 $(24, 44, 14, 58, 52, 31, 13, 54, 60, 57, 22, 16,$
 $28, 7, 62, 5, 3, 50, 37, 21, 19, 45, 8, 34)_{G6},$
 $(47, 51, 2, 54, 5, 37, 38, 35, 8, 19, 7, 23,$
 $4, 32, 56, 27, 24, 59, 50, 13, 52, 17, 44, 20)_{G6},$
 $(48, 34, 2, 28, 38, 4, 26, 14, 35, 58, 16, 30,$
 $32, 29, 44, 23, 62, 31, 7, 37, 17, 47, 19, 5)_{G6},$
 $(\infty, 15, 38, 13, 43, 25, 17, 42, 57, 35, 53, 46,$
 $29, 32, 20, 21, 26, 47, 49, 31, 40, 2, 7, 48)_{G7},$
 $(28, 25, 21, 6, 30, 45, 39, 58, 22, 33, 15, 11,$
 $8, 24, 26, 54, 20, 0, 14, 3, 53, 43, 29, 12)_{G7},$
 $(42, 13, 46, 36, 49, 9, 28, 32, 7, 21, 56, 35,$
 $18, 25, 27, 51, 23, 33, 16, 48, 4, 2, 19, 10)_{G7},$
 $(58, 4, 2, 50, 8, 10, 42, 61, 3, 52, 46, 48,$
 $29, 26, 25, 14, 34, 43, 40, 31, 17, 19, 49, 28)_{G7},$
 $(\infty, 60, 41, 7, 26, 30, 3, 58, 15, 54, 20, 9,$
 $22, 11, 38, 34, 35, 56, 33, 14, 31, 13, 52, 6)_{G8},$
 $(46, 31, 55, 2, 19, 59, 25, 53, 58, 21, 4, 42,$
 $38, 54, 1, 41, 27, 60, 14, 16, 26, 32, 9, 5)_{G8},$
 $(59, 49, 46, 19, 26, 0, 33, 56, 24, 42, 22, 1,$
 $23, 21, 51, 35, 15, 7, 3, 12, 52, 54, 2, 25)_{G8},$
 $(37, 27, 53, 0, 36, 4, 23, 54, 39, 1, 57, 30,$
 $22, 13, 59, 33, 7, 21, 38, 8, 18, 60, 20, 61)_{G8},$
 $(\infty, 49, 24, 17, 40, 46, 1, 9, 6, 7, 27, 34,$
 $25, 5, 53, 33, 30, 2, 3, 56, 8, 45, 39, 55)_{G9},$
 $(54, 41, 15, 8, 11, 34, 46, 22, 18, 28, 32, 17,$
 $16, 36, 49, 13, 3, 12, 51, 61, 31, 35, 33, 43)_{G9},$
 $(32, 59, 58, 53, 18, 43, 45, 11, 14, 40, 28, 2,$
 $9, 1, 55, 44, 23, 56, 47, 38, 51, 17, 29, 3)_{G9},$
 $(27, 62, 8, 41, 25, 42, 40, 26, 20, 60, 15, 35,$
 $11, 44, 32, 29, 17, 61, 50, 48, 3, 14, 23, 12)_{G9},$
 $(\infty, 53, 36, 55, 14, 24, 37, 41, 59, 5, 9, 29,$
 $8, 17, 42, 4, 60, 32, 20, 49, 6, 19, 56, 43)_{G10},$

(44, 60, 28, 53, 29, 18, 6, 7, 54, 58, 42, 62,
 50, 56, 13, 2, 40, 21, 35, 16, 25, 48, 52, 39)_{G10},
 (29, 10, 23, 9, 0, 27, 3, 17, 25, 37, 36, 12,
 11, 16, 28, 61, 33, 6, 21, 39, 40, 19, 46, 49)_{G10},
 (16, 6, 43, 3, 42, 59, 62, 40, 61, 30, 24, 27,
 12, 15, 33, 22, 49, 7, 18, 58, 31, 10, 54, 55)_{G10},
 (∞ , 44, 43, 15, 55, 41, 50, 18, 45, 26, 23, 37,
 20, 3, 7, 35, 48, 1, 12, 61, 8, 42, 59, 38)_{G11},
 (26, 47, 38, 39, 15, 22, 55, 32, 43, 21, 14, 23,
 52, 48, 57, 28, 0, 37, 56, 50, 41, 51, 29, 13)_{G11},
 (18, 44, 6, 30, 9, 0, 57, 61, 52, 56, 1, 58,
 19, 55, 12, 21, 49, 27, 37, 40, 31, 16, 15, 34)_{G11},
 (42, 14, 28, 27, 33, 51, 48, 60, 16, 61, 22, 57,
 58, 4, 43, 10, 19, 25, 9, 13, 55, 24, 18, 21)_{G11},
 (∞ , 49, 23, 15, 36, 29, 37, 3, 50, 51, 26, 54,
 5, 60, 56, 40, 53, 22, 47, 14, 16, 58, 35, 55)_{G12},
 (43, 28, 35, 26, 21, 22, 51, 48, 31, 16, 50, 11,
 56, 13, 52, 5, 57, 10, 32, 60, 33, 29, 54, 14)_{G12},
 (50, 2, 35, 21, 36, 17, 61, 10, 42, 39, 51, 7,
 47, 24, 4, 15, 3, 58, 22, 40, 30, 28, 25, 18)_{G12},
 (34, 6, 59, 39, 1, 27, 52, 22, 55, 16, 3, 36,
 51, 33, 12, 45, 37, 54, 13, 0, 10, 24, 9, 48)_{G12},
 (∞ , 44, 39, 34, 26, 61, 59, 4, 47, 19, 24, 23,
 60, 41, 20, 40, 30, 1, 43, 12, 50, 56, 18, 3)_{G13},
 (4, 31, 56, 55, 51, 47, 22, 16, 0, 54, 10, 26,
 11, 52, 12, 58, 40, 42, 46, 15, 43, 28, 38, 5)_{G13},
 (48, 51, 2, 53, 24, 46, 43, 60, 41, 31, 30, 57,
 26, 42, 29, 36, 54, 6, 28, 39, 50, 58, 9, 38)_{G13},
 (6, 41, 17, 47, 12, 43, 39, 48, 35, 36, 27, 57,
 50, 0, 2, 44, 5, 26, 45, 11, 32, 24, 42, 9)_{G13},
 (∞ , 36, 8, 22, 13, 57, 62, 3, 26, 5, 56, 12,
 49, 44, 35, 40, 42, 7, 21, 6, 30, 28, 50, 31)_{G14},
 (1, 0, 21, 60, 24, 27, 59, 62, 54, 34, 35, 39,
 45, 23, 37, 61, 42, 20, 48, 4, 6, 2, 50, 55)_{G14},
 (3, 14, 16, 19, 27, 22, 43, 35, 38, 11, 17, 40,
 50, 24, 2, 47, 49, 55, 7, 29, 32, 13, 37, 28)_{G14},
 (44, 37, 43, 22, 4, 46, 35, 50, 52, 9, 5, 61,
 34, 40, 42, 7, 55, 31, 53, 41, 39, 26, 2, 10)_{G14},
 (∞ , 47, 16, 24, 38, 42, 9, 5, 26, 25, 29, 37,
 52, 18, 20, 6, 22, 0, 1, 30, 55, 28, 41, 40)_{G15},

(21, 38, 33, 19, 4, 41, 29, 10, 26, 1, 23, 9,
 36, 22, 51, 8, 20, 58, 44, 61, 14, 56, 24, 18)_{G15},
 (50, 7, 2, 15, 62, 38, 32, 17, 29, 18, 57, 46,
 43, 49, 27, 20, 1, 24, 33, 60, 48, 10, 42, 25)_{G15},
 (13, 57, 51, 48, 30, 12, 36, 32, 33, 39, 58, 26,
 40, 16, 54, 41, 25, 31, 19, 10, 18, 0, 62, 27)_{G15},
 (∞ , 8, 54, 49, 25, 35, 27, 20, 47, 58, 12, 51,
 42, 7, 9, 57, 55, 43, 44, 16, 56, 21, 11, 24)_{G16},
 (49, 61, 23, 9, 54, 47, 29, 27, 28, 14, 21, 56,
 51, 38, 53, 36, 42, 39, 58, 3, 22, 59, 48, 2)_{G16},
 (29, 48, 58, 11, 37, 10, 34, 31, 53, 49, 55, 57,
 59, 8, 60, 19, 54, 25, 13, 43, 7, 16, 46, 32)_{G16},
 (52, 44, 17, 22, 10, 19, 29, 59, 16, 37, 47, 13,
 41, 20, 58, 31, 34, 49, 61, 6, 53, 50, 46, 9)_{G16},
 (∞ , 37, 42, 23, 5, 55, 39, 35, 18, 24, 34, 36,
 45, 41, 40, 27, 3, 2, 16, 57, 49, 29, 13, 25)_{G17},
 (18, 39, 13, 6, 22, 20, 38, 15, 0, 61, 24, 55,
 51, 37, 49, 48, 3, 23, 33, 11, 8, 28, 44, 50)_{G17},
 (13, 16, 23, 27, 55, 26, 53, 12, 38, 4, 44, 15,
 61, 6, 1, 11, 43, 41, 17, 46, 20, 29, 50, 32)_{G17},
 (48, 62, 25, 13, 56, 5, 8, 10, 61, 28, 23, 22,
 45, 1, 35, 26, 29, 14, 59, 20, 40, 31, 16, 11)_{G17},
 (∞ , 51, 10, 23, 60, 20, 7, 53, 39, 24, 57, 49,
 2, 37, 44, 31, 0, 40, 52, 45, 9, 25, 16, 17)_{G18},
 (48, 23, 7, 51, 56, 29, 47, 36, 32, 39, 42, 18,
 9, 54, 0, 12, 37, 24, 10, 14, 59, 52, 38, 25)_{G18},
 (36, 29, 38, 53, 32, 19, 35, 31, 16, 37, 10, 15,
 18, 3, 44, 40, 8, 22, 47, 59, 20, 61, 4, 49)_{G18},
 (32, 30, 47, 5, 34, 59, 16, 43, 1, 23, 13, 42,
 41, 52, 55, 22, 44, 26, 19, 11, 61, 10, 8, 56)_{G18},
 (∞ , 0, 26, 40, 31, 51, 22, 54, 33, 21, 16, 10,
 11, 35, 7, 52, 57, 30, 49, 20, 46, 36, 2, 43)_{G19},
 (43, 53, 31, 8, 46, 1, 25, 23, 59, 30, 60, 19,
 12, 40, 22, 7, 20, 14, 11, 44, 2, 39, 26, 41)_{G19},
 (1, 49, 16, 62, 8, 47, 38, 31, 41, 15, 57, 0,
 54, 19, 24, 42, 39, 21, 45, 9, 6, 5, 12, 2)_{G19},
 (29, 8, 24, 50, 18, 12, 3, 21, 54, 20, 26, 57,
 44, 14, 6, 9, 33, 48, 0, 51, 23, 45, 60, 25)_{G19},
 (∞ , 36, 11, 43, 44, 16, 22, 32, 41, 40, 50, 58,
 55, 0, 56, 2, 10, 4, 26, 53, 35, 54, 9, 25)_{G20},

(28, 58, 34, 41, 3, 27, 24, 12, 26, 23, 17, 18,
 59, 37, 21, 7, 11, 55, 36, 46, 57, 19, 42, 9) $_{G20}$,
 (36, 1, 47, 2, 37, 48, 11, 9, 46, 60, 54, 42,
 29, 21, 25, 20, 12, 5, 33, 44, 41, 40, 49, 30) $_{G20}$,
 (22, 49, 59, 5, 15, 33, 39, 35, 54, 10, 27, 36,
 24, 30, 3, 41, 43, 53, 8, 0, 26, 52, 16, 51) $_{G20}$,
 (∞ , 10, 35, 42, 32, 61, 26, 7, 44, 46, 18, 48,
 13, 53, 62, 14, 34, 50, 3, 21, 58, 39, 55, 4) $_{G21}$,
 (59, 60, 29, 17, 11, 55, 3, 19, 0, 27, 32, 40,
 20, 37, 46, 4, 39, 5, 44, 50, 43, 57, 62, 18) $_{G21}$,
 (20, 22, 56, 49, 51, 11, 60, 53, 18, 57, 14, 61,
 40, 50, 1, 59, 21, 0, 54, 3, 7, 25, 27, 33) $_{G21}$,
 (45, 30, 57, 33, 61, 58, 27, 28, 1, 55, 51, 60,
 62, 54, 15, 3, 52, 35, 46, 9, 39, 12, 49, 24) $_{G21}$,
 (∞ , 11, 6, 58, 30, 61, 36, 17, 16, 57, 2, 14,
 51, 47, 34, 1, 50, 22, 32, 25, 45, 21, 10, 40) $_{G22}$,
 (33, 60, 55, 32, 10, 58, 18, 19, 7, 6, 12, 23,
 5, 37, 21, 22, 16, 31, 20, 45, 46, 54, 50, 52) $_{G22}$,
 (55, 39, 14, 50, 11, 47, 36, 60, 8, 59, 24, 33,
 57, 32, 2, 40, 51, 17, 45, 5, 35, 62, 38, 29) $_{G22}$,
 (39, 8, 36, 56, 30, 17, 5, 50, 14, 15, 41, 42,
 57, 53, 35, 29, 45, 12, 2, 27, 38, 9, 62, 43) $_{G22}$,
 (∞ , 42, 52, 5, 28, 25, 30, 9, 60, 32, 59, 38,
 14, 2, 18, 19, 58, 7, 37, 47, 55, 17, 13, 36) $_{G23}$,
 (8, 52, 53, 34, 10, 37, 9, 31, 20, 57, 48, 62,
 25, 22, 7, 40, 61, 41, 6, 58, 29, 33, 3, 54) $_{G23}$,
 (19, 2, 54, 9, 18, 14, 30, 45, 41, 8, 38, 11,
 0, 39, 59, 60, 53, 42, 51, 35, 29, 20, 57, 26) $_{G23}$,
 (62, 14, 16, 36, 24, 23, 51, 6, 42, 0, 40, 2,
 5, 30, 53, 12, 11, 26, 57, 50, 21, 54, 15, 3) $_{G23}$,
 (∞ , 33, 53, 43, 20, 28, 46, 11, 30, 59, 42, 32,
 52, 45, 48, 10, 49, 12, 3, 44, 36, 37, 1, 26) $_{G24}$,
 (30, 55, 31, 22, 58, 26, 7, 49, 52, 32, 28, 14,
 29, 45, 5, 37, 46, 13, 17, 3, 60, 0, 2, 57) $_{G24}$,
 (50, 12, 3, 57, 45, 30, 55, 2, 34, 20, 40, 15,
 27, 33, 59, 0, 25, 60, 18, 53, 35, 41, 11, 44) $_{G24}$,
 (17, 11, 47, 18, 20, 30, 14, 24, 36, 44, 62, 45,
 5, 13, 21, 6, 15, 26, 41, 51, 48, 32, 55, 29) $_{G24}$,
 (∞ , 0, 23, 46, 6, 60, 20, 27, 40, 10, 25, 1,
 59, 7, 41, 15, 8, 13, 50, 56, 48, 35, 30, 61) $_{G25}$,

(9, 24, 49, 45, 3, 15, 50, 54, 4, 6, 48, 33,
 17, 22, 8, 2, 52, 11, 25, 31, 60, 26, 36, 13)_{G25},
 (42, 30, 54, 49, 37, 55, 61, 16, 51, 12, 22, 57,
 50, 46, 11, 5, 45, 2, 56, 43, 44, 19, 23, 40)_{G25},
 (62, 34, 50, 28, 38, 23, 17, 32, 4, 11, 15, 44,
 26, 7, 52, 40, 45, 20, 37, 31, 35, 53, 2, 59)_{G25},
 (∞ , 39, 26, 4, 54, 43, 44, 13, 10, 21, 12, 2,
 47, 61, 28, 14, 35, 53, 3, 41, 38, 49, 9, 46)_{G26},
 (11, 6, 20, 32, 5, 61, 27, 34, 43, 1, 10, 25,
 21, 16, 0, 56, 30, 45, 19, 40, 28, 41, 47, 31)_{G26},
 (16, 46, 17, 49, 47, 44, 60, 56, 50, 24, 8, 41,
 42, 20, 57, 0, 14, 2, 3, 9, 51, 30, 27, 18)_{G26},
 (43, 18, 41, 9, 30, 54, 17, 21, 48, 6, 42, 36,
 57, 46, 51, 13, 50, 8, 15, 12, 45, 11, 3, 24)_{G26},
 (∞ , 41, 22, 48, 9, 38, 30, 18, 11, 46, 59, 10,
 17, 3, 47, 1, 56, 51, 45, 15, 37, 13, 44, 19)_{G27},
 (23, 15, 59, 43, 45, 49, 42, 9, 40, 17, 2, 34,
 32, 19, 21, 52, 53, 20, 62, 12, 26, 61, 6, 22)_{G27},
 (9, 22, 33, 0, 54, 42, 34, 51, 36, 1, 7, 15,
 12, 19, 43, 24, 6, 4, 25, 8, 11, 2, 56, 50)_{G27},
 (31, 1, 61, 56, 32, 28, 50, 59, 17, 9, 53, 49,
 35, 12, 55, 22, 21, 48, 57, 58, 27, 3, 16, 46)_{G27},
 (∞ , 40, 24, 20, 55, 15, 28, 1, 48, 31, 38, 36,
 14, 19, 61, 37, 51, 35, 30, 58, 41, 11, 49, 33)_{G28},
 (30, 24, 57, 44, 62, 17, 40, 37, 58, 34, 1, 0,
 56, 15, 29, 12, 10, 16, 59, 2, 3, 25, 54, 23)_{G28},
 (28, 27, 11, 59, 9, 13, 33, 0, 18, 38, 21, 1,
 55, 5, 53, 3, 35, 52, 6, 36, 42, 40, 23, 51)_{G28},
 (48, 9, 24, 59, 5, 53, 56, 16, 14, 11, 32, 57,
 62, 42, 2, 61, 38, 58, 21, 12, 35, 29, 17, 26)_{G28},
 (∞ , 20, 54, 7, 2, 14, 38, 23, 4, 9, 51, 36,
 10, 35, 25, 32, 56, 49, 30, 61, 21, 31, 55, 47)_{G29},
 (25, 35, 56, 9, 24, 28, 57, 2, 59, 0, 16, 39,
 40, 43, 38, 48, 29, 53, 58, 34, 5, 62, 36, 54)_{G29},
 (40, 30, 59, 5, 6, 51, 42, 62, 2, 25, 53, 22,
 34, 45, 37, 15, 60, 52, 7, 41, 3, 12, 36, 39)_{G29},
 (61, 54, 34, 6, 18, 29, 1, 0, 55, 9, 12, 27,
 49, 58, 10, 19, 3, 48, 51, 22, 40, 46, 62, 2)_{G29},
 (∞ , 3, 20, 43, 38, 5, 46, 59, 29, 39, 18, 36,
 48, 41, 31, 30, 16, 44, 9, 15, 13, 45, 61, 10)_{G30},

(45, 30, 3, 38, 58, 49, 40, 41, 17, 7, 34, 50,
 29, 37, 12, 47, 54, 9, 2, 51, 48, 46, 36, 32)_{G30},
 (57, 0, 14, 8, 45, 6, 62, 60, 2, 19, 24, 12,
 37, 17, 50, 38, 30, 52, 53, 47, 49, 43, 59, 40)_{G30},
 (22, 1, 10, 50, 55, 26, 34, 49, 20, 25, 29, 19,
 13, 11, 14, 44, 7, 46, 0, 31, 16, 59, 40, 52)_{G30},
 (∞ , 43, 38, 18, 44, 56, 52, 51, 36, 29, 30, 17,
 53, 55, 22, 9, 7, 21, 62, 11, 27, 61, 26, 40)_{G31},
 (62, 17, 10, 56, 22, 59, 57, 58, 15, 31, 43, 52,
 61, 46, 24, 18, 50, 13, 30, 19, 25, 6, 33, 23)_{G31},
 (25, 62, 42, 5, 31, 16, 14, 52, 54, 39, 27, 47,
 12, 17, 37, 11, 59, 50, 0, 3, 2, 28, 35, 51)_{G31},
 (42, 6, 26, 12, 54, 36, 60, 59, 1, 48, 0, 3,
 29, 62, 47, 24, 13, 27, 15, 2, 4, 41, 21, 53)_{G31},
 (∞ , 58, 41, 21, 47, 54, 43, 57, 35, 12, 34, 19,
 49, 38, 25, 33, 2, 45, 50, 4, 5, 62, 6, 60)_{G32},
 (25, 4, 6, 36, 53, 31, 30, 11, 13, 5, 59, 34,
 52, 20, 42, 18, 14, 33, 45, 0, 24, 44, 51, 7)_{G32},
 (48, 43, 30, 0, 4, 35, 23, 15, 58, 29, 62, 55,
 33, 10, 1, 50, 47, 61, 46, 49, 21, 52, 31, 34)_{G32},
 (19, 31, 2, 11, 25, 23, 8, 41, 55, 47, 38, 50,
 17, 35, 16, 4, 45, 7, 32, 40, 37, 60, 27, 53)_{G32},
 (∞ , 17, 15, 46, 27, 1, 52, 53, 24, 39, 0, 60,
 59, 26, 23, 12, 9, 28, 57, 21, 4, 32, 58, 18)_{G33},
 (4, 26, 51, 33, 9, 18, 2, 7, 3, 11, 6, 0,
 56, 32, 31, 61, 38, 58, 28, 48, 37, 5, 55, 35)_{G33},
 (50, 5, 38, 61, 33, 42, 12, 56, 13, 55, 0, 23,
 21, 32, 34, 44, 43, 31, 2, 58, 29, 10, 14, 26)_{G33},
 (26, 0, 8, 58, 44, 35, 10, 32, 56, 22, 61, 43,
 17, 13, 19, 16, 31, 28, 38, 25, 37, 20, 1, 59)_{G33},
 (∞ , 43, 0, 5, 20, 14, 50, 46, 57, 11, 52, 7,
 21, 1, 37, 15, 25, 3, 48, 9, 59, 18, 26, 27)_{G34},
 (51, 22, 58, 42, 61, 32, 49, 9, 21, 16, 30, 31,
 3, 6, 35, 44, 15, 23, 52, 50, 7, 38, 60, 10)_{G34},
 (41, 57, 48, 58, 22, 29, 37, 53, 38, 52, 11, 44,
 7, 18, 15, 36, 20, 1, 17, 26, 23, 43, 4, 8)_{G34},
 (45, 38, 34, 5, 30, 19, 53, 47, 46, 60, 13, 2,
 32, 25, 59, 44, 26, 28, 29, 41, 40, 24, 23, 14)_{G34},
 (∞ , 50, 43, 48, 59, 61, 21, 5, 22, 6, 49, 45,
 24, 15, 30, 9, 4, 17, 41, 28, 18, 2, 25, 42)_{G35},

$(0, 25, 1, 50, 6, 30, 34, 60, 39, 45, 8, 57,$
 $15, 9, 47, 29, 44, 40, 17, 19, 23, 61, 55, 5)_{G35},$
 $(60, 23, 53, 14, 3, 19, 37, 20, 29, 47, 46, 62,$
 $35, 6, 9, 4, 22, 40, 52, 26, 25, 61, 41, 59)_{G35},$
 $(22, 58, 25, 32, 53, 55, 52, 38, 39, 18, 16, 62,$
 $34, 31, 56, 11, 37, 2, 59, 40, 10, 46, 5, 44)_{G35},$
 $(\infty, 53, 51, 25, 37, 46, 58, 62, 21, 45, 50, 43,$
 $19, 26, 24, 1, 32, 60, 11, 16, 38, 27, 23, 61)_{G36},$
 $(17, 29, 59, 14, 4, 54, 58, 51, 43, 31, 44, 1,$
 $19, 52, 8, 3, 15, 34, 56, 27, 55, 33, 53, 61)_{G36},$
 $(41, 19, 9, 42, 7, 31, 21, 8, 30, 12, 54, 43,$
 $38, 57, 36, 39, 26, 45, 2, 27, 60, 33, 18, 3)_{G36},$
 $(38, 5, 62, 51, 54, 33, 40, 8, 24, 42, 57, 48,$
 $6, 41, 0, 59, 50, 46, 2, 17, 9, 11, 60, 30)_{G36},$
 $(\infty, 34, 50, 51, 37, 42, 18, 40, 25, 59, 4, 28,$
 $5, 23, 56, 38, 0, 54, 7, 33, 12, 39, 3, 16)_{G37},$
 $(24, 62, 60, 12, 29, 59, 2, 40, 53, 30, 58, 47,$
 $28, 9, 42, 50, 45, 6, 25, 18, 10, 20, 52, 14)_{G37},$
 $(60, 18, 59, 13, 53, 39, 36, 50, 38, 37, 56, 11,$
 $1, 43, 35, 2, 21, 49, 12, 55, 34, 5, 22, 33)_{G37},$
 $(13, 8, 41, 49, 40, 53, 59, 24, 25, 55, 62, 34,$
 $1, 52, 47, 19, 16, 0, 4, 14, 26, 46, 29, 61)_{G37}$

and

$(\infty, 55, 5, 21, 24, 54, 52, 9, 38, 59, 53, 16,$
 $30, 62, 58, 7, 41, 46, 17, 40, 36, 50, 3, 47)_{G38},$
 $(16, 47, 34, 18, 39, 5, 8, 38, 20, 31, 53, 7,$
 $43, 15, 2, 40, 10, 13, 24, 41, 33, 30, 22, 59)_{G38},$
 $(47, 0, 55, 56, 26, 36, 17, 49, 6, 31, 27, 54,$
 $30, 1, 34, 51, 58, 39, 57, 10, 42, 16, 46, 52)_{G38},$
 $(48, 12, 30, 24, 54, 36, 33, 51, 42, 50, 29, 40,$
 $6, 35, 7, 3, 59, 9, 32, 0, 46, 43, 58, 39)_{G38}$

under the action of the mapping $\infty \mapsto \infty$, $x \mapsto x + 3 \pmod{63}$ for the first two graphs in each design, and $x \mapsto x + 9 \pmod{63}$ for the last two.

Let the vertex set of K_{73} be Z_{73} . The decompositions consist of

$(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 24, 30,$
 $28, 44, 4, 47, 49, 10, 35, 70, 8, 21, 61, 45)_{G1},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 24, 25,$
 $28, 44, 42, 4, 47, 12, 70, 39, 20, 8, 45, 63)_{G2},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 24, 25,$
 $28, 31, 42, 4, 9, 50, 54, 7, 10, 48, 43, 23)_{G3},$

$(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 24, 25,$
 $28, 31, 42, 43, 4, 8, 55, 53, 7, 72, 45, 22)_{G4},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 30,$
 $28, 45, 34, 54, 4, 7, 60, 18, 31, 52, 29, 59)_{G5},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 30,$
 $28, 44, 34, 47, 4, 7, 64, 8, 32, 50, 29, 55)_{G6},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 30,$
 $28, 31, 34, 47, 50, 7, 8, 55, 63, 20, 18, 46)_{G7},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 30,$
 $28, 31, 34, 48, 8, 52, 7, 4, 54, 64, 17, 36)_{G8},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 30,$
 $28, 31, 33, 48, 54, 52, 8, 4, 53, 71, 10, 45)_{G9},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 25,$
 $28, 31, 42, 34, 53, 61, 51, 4, 71, 52, 9, 39)_{G10},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 25,$
 $28, 31, 42, 39, 51, 71, 50, 70, 7, 49, 10, 32)_{G11},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 25,$
 $28, 31, 33, 45, 63, 72, 56, 7, 8, 58, 20, 39)_{G12},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 25,$
 $28, 31, 42, 37, 60, 67, 52, 72, 70, 50, 9, 30)_{G13},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 21, 19,$
 $27, 39, 37, 40, 59, 4, 61, 15, 66, 23, 33, 54)_{G14},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 21, 19,$
 $23, 37, 39, 40, 55, 50, 69, 12, 62, 15, 25, 46)_{G15},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 21, 19,$
 $23, 39, 40, 4, 41, 56, 8, 34, 10, 70, 36, 58)_{G16},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 21, 19,$
 $23, 29, 39, 57, 46, 49, 72, 4, 51, 14, 7, 37)_{G17},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 21, 19,$
 $23, 29, 39, 43, 66, 51, 71, 8, 53, 7, 20, 42)_{G18},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 21, 19,$
 $23, 29, 4, 49, 56, 69, 62, 71, 25, 39, 15, 42)_{G19},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 33, 38, 55, 46, 62, 66, 10, 12, 14, 40, 41)_{G20},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 33, 38, 40, 62, 49, 72, 64, 4, 8, 37, 31)_{G21},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 33, 39, 34, 40, 53, 10, 8, 7, 56, 12, 46)_{G22},$

$(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 33, 39, 40, 48, 4, 49, 14, 10, 61, 15, 46)_{G23},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 33, 38, 44, 50, 39, 58, 15, 72, 17, 21, 60)_{G24},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 24, 38, 41, 43, 65, 70, 69, 63, 12, 33, 30)_{G25},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 24, 38, 45, 49, 44, 10, 52, 64, 4, 26, 15)_{G26},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 24, 38, 35, 45, 42, 69, 63, 68, 71, 17, 36)_{G27},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $27, 24, 38, 35, 53, 46, 51, 72, 61, 68, 23, 20)_{G28},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $32, 24, 29, 47, 60, 43, 4, 42, 7, 46, 20, 72)_{G29},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $32, 24, 40, 39, 37, 56, 65, 69, 8, 57, 27, 30)_{G30},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $32, 24, 40, 39, 59, 54, 68, 72, 64, 20, 23, 42)_{G31},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $32, 24, 40, 39, 42, 37, 4, 62, 60, 71, 20, 30)_{G32},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $32, 24, 40, 39, 36, 47, 69, 55, 17, 15, 60, 21)_{G33},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $32, 24, 29, 4, 43, 56, 45, 7, 52, 72, 51, 10)_{G34},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $23, 24, 39, 40, 43, 48, 53, 62, 68, 10, 27, 26)_{G35},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $23, 24, 39, 40, 41, 51, 55, 66, 61, 7, 31, 26)_{G36},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 14, 18, 19,$
 $25, 28, 26, 34, 32, 53, 51, 45, 56, 68, 69, 22)_{G37}$

and

$(0, 1, 2, 3, 5, 6, 11, 9, 13, 14, 18, 19,$
 $25, 28, 26, 38, 43, 66, 56, 35, 59, 63, 4, 16)_{G38}$

under the action of the mapping $x \mapsto x + 1 \pmod{73}$.

Let the vertex set of K_{145} be Z_{145} . The decompositions consist of

$(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 24, 30,$
 $28, 44, 4, 47, 7, 8, 26, 9, 49, 33, 58, 76)_{G1},$
 $(0, 28, 30, 31, 61, 62, 96, 99, 101, 70, 5, 6,$
 $1, 42, 49, 95, 63, 124, 98, 23, 11, 114, 53, 71)_{G1},$

$(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 24, 25,$
 $28, 44, 42, 4, 9, 7, 8, 26, 32, 51, 78, 62)_{G_2},$
 $(0, 28, 31, 32, 61, 63, 99, 103, 108, 71, 4, 10,$
 $2, 47, 112, 56, 62, 129, 29, 106, 120, 14, 78, 41)_{G_2},$
 $(122, 41, 16, 65, 93, 90, 83, 99, 25, 137, 55, 9,$
 $8, 105, 95, 47, 1, 2, 3, 5, 0, 11, 17, 24)_{G_3},$
 $(0, 1, 4, 5, 15, 16, 33, 35, 38, 25, 50, 3,$
 $7, 6, 49, 87, 77, 108, 104, 82, 90, 138, 24, 48)_{G_3},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 24, 25,$
 $28, 31, 42, 4, 44, 7, 50, 54, 74, 67, 101, 8)_{G_4},$
 $(0, 28, 29, 30, 59, 60, 93, 95, 92, 66, 5, 1,$
 $2, 3, 105, 100, 55, 89, 39, 41, 88, 31, 11, 111)_{G_4},$
 $(5, 17, 106, 0, 110, 72, 81, 117, 83, 136, 85, 61,$
 $69, 10, 142, 4, 12, 2, 86, 134, 8, 11, 21, 25)_{G_5},$
 $(0, 2, 3, 14, 18, 20, 44, 41, 46, 45, 50, 10,$
 $4, 88, 6, 83, 51, 134, 91, 25, 142, 101, 38, 68)_{G_5},$
 $(114, 9, 69, 140, 130, 39, 47, 40, 88, 99, 135, 117,$
 $67, 75, 53, 23, 35, 78, 49, 58, 93, 15, 126, 132)_{G_6},$
 $(0, 2, 5, 6, 9, 11, 19, 22, 21, 25, 27, 50,$
 $1, 57, 80, 87, 24, 107, 4, 15, 102, 103, 42, 43)_{G_6},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 30,$
 $28, 31, 34, 47, 4, 7, 53, 54, 8, 72, 81, 101)_{G_7},$
 $(0, 28, 30, 31, 60, 62, 95, 99, 98, 67, 1, 4,$
 $6, 3, 106, 45, 48, 108, 103, 49, 44, 101, 123, 16)_{G_7},$
 $(107, 12, 20, 21, 57, 10, 81, 102, 22, 138, 84, 2,$
 $14, 121, 6, 41, 113, 4, 143, 18, 95, 120, 56, 140)_{G_8},$
 $(0, 4, 5, 6, 12, 15, 24, 32, 42, 27, 33, 2,$
 $3, 1, 65, 102, 51, 101, 43, 45, 76, 142, 21, 105)_{G_8},$
 $(0, 1, 2, 3, 5, 6, 11, 13, 15, 16, 14, 30,$
 $28, 31, 33, 48, 53, 4, 7, 54, 56, 70, 82, 97)_{G_9},$
 $(0, 28, 30, 31, 60, 61, 95, 99, 101, 67, 1, 3,$
 $2, 7, 4, 48, 62, 44, 93, 100, 47, 92, 130, 21)_{G_9},$
 $(51, 125, 128, 43, 67, 63, 38, 9, 48, 122, 56, 113,$
 $101, 33, 44, 124, 89, 20, 138, 90, 42, 93, 121, 65)_{G_{10}},$
 $(0, 1, 4, 6, 11, 14, 25, 34, 33, 22, 32, 49,$
 $3, 67, 95, 58, 96, 10, 108, 45, 20, 2, 52, 104)_{G_{10}},$
 $(25, 122, 34, 11, 4, 6, 49, 99, 75, 53, 67, 29,$
 $23, 22, 142, 18, 86, 114, 127, 69, 44, 112, 91, 74)_{G_{11}},$
 $(0, 1, 2, 3, 5, 7, 12, 15, 21, 14, 24, 35,$
 $39, 46, 61, 45, 58, 102, 6, 78, 97, 141, 83, 137)_{G_{11}},$

(117, 64, 104, 116, 42, 114, 113, 36, 99, 80, 126, 88,
 63, 55, 29, 43, 128, 50, 14, 9, 127, 89, 95, 85)_{G12},
 (0, 3, 4, 5, 10, 11, 20, 22, 24, 25, 26, 43,
 46, 50, 54, 83, 124, 109, 108, 132, 139, 93, 9, 57)_{G12},
 (91, 61, 10, 84, 43, 137, 19, 6, 33, 123, 44, 92,
 51, 120, 100, 28, 8, 88, 94, 93, 15, 16, 113, 114)_{G13},
 (0, 1, 2, 3, 6, 7, 17, 24, 19, 28, 34, 45,
 53, 50, 77, 63, 101, 132, 86, 141, 120, 87, 4, 67)_{G13},
 (134, 32, 14, 58, 85, 129, 23, 139, 130, 133, 75, 141,
 107, 86, 41, 17, 40, 124, 8, 125, 33, 26, 37, 119)_{G14},
 (0, 2, 3, 8, 12, 13, 25, 18, 38, 44, 57, 30,
 69, 71, 1, 54, 87, 117, 83, 133, 111, 26, 43, 68)_{G14},
 (66, 125, 73, 74, 21, 18, 25, 0, 24, 130, 79, 6,
 45, 133, 141, 12, 135, 98, 30, 83, 108, 78, 131, 100)_{G15},
 (0, 1, 5, 9, 14, 15, 30, 23, 33, 51, 43, 41,
 50, 4, 88, 6, 82, 132, 8, 49, 99, 31, 68, 107)_{G15},
 (0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 21, 19,
 23, 39, 40, 4, 41, 43, 7, 27, 12, 65, 90, 55)_{G16},
 (0, 27, 30, 32, 61, 63, 98, 71, 103, 137, 2, 3,
 1, 45, 48, 94, 55, 80, 121, 16, 143, 106, 26, 62)_{G16},
 (0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 21, 19,
 23, 29, 39, 57, 40, 45, 46, 4, 72, 7, 8, 70)_{G17},
 (0, 27, 28, 29, 57, 58, 95, 62, 97, 130, 1, 2,
 3, 4, 47, 86, 56, 54, 100, 107, 53, 132, 128, 42)_{G17},
 (142, 130, 88, 24, 71, 113, 89, 6, 105, 109, 36, 98,
 102, 54, 51, 59, 19, 99, 91, 86, 134, 112, 90, 119)_{G18},
 (0, 2, 4, 5, 8, 10, 18, 20, 27, 42, 41, 35,
 46, 56, 77, 79, 135, 136, 82, 97, 139, 125, 66, 30)_{G18},
 (89, 100, 36, 52, 43, 14, 51, 83, 55, 65, 9, 18,
 81, 11, 143, 40, 91, 39, 131, 74, 7, 121, 73, 6)_{G19},
 (0, 6, 10, 16, 23, 25, 46, 30, 51, 70, 57, 55,
 4, 2, 1, 108, 96, 9, 85, 42, 41, 61, 141, 84)_{G19},
 (112, 139, 142, 61, 34, 76, 99, 101, 107, 67, 91, 132,
 4, 135, 74, 56, 134, 78, 10, 124, 133, 2, 33, 95)_{G20},
 (0, 3, 4, 5, 12, 13, 23, 16, 26, 58, 29, 35,
 49, 53, 1, 60, 61, 2, 115, 141, 111, 22, 80, 45)_{G20},
 (72, 20, 125, 26, 54, 1, 50, 41, 133, 86, 128, 8,
 47, 131, 4, 109, 75, 79, 126, 73, 53, 101, 112, 30)_{G21},
 (0, 1, 2, 9, 11, 13, 24, 17, 36, 40, 30, 33,
 65, 71, 70, 57, 107, 16, 128, 134, 122, 92, 34, 39)_{G21},

(103, 45, 19, 86, 121, 44, 47, 9, 42, 27, 142, 139,
 77, 123, 136, 82, 99, 54, 134, 110, 74, 124, 97, 10)_{G22},
 (0, 4, 5, 6, 11, 13, 23, 18, 35, 38, 29, 43,
 57, 66, 76, 63, 84, 109, 20, 25, 14, 117, 27, 87)_{G22},
 (0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,
 27, 33, 39, 34, 40, 4, 55, 7, 65, 60, 10, 92)_{G23},
 (0, 28, 29, 33, 62, 63, 98, 66, 100, 137, 4, 1,
 2, 106, 47, 56, 49, 91, 19, 96, 117, 14, 93, 26)_{G23},
 (132, 119, 38, 85, 58, 10, 67, 64, 78, 66, 133, 98,
 118, 88, 49, 62, 87, 137, 16, 131, 6, 44, 39, 56)_{G24},
 (0, 2, 3, 4, 7, 8, 28, 11, 34, 38, 23, 24,
 66, 60, 69, 101, 103, 76, 125, 27, 16, 39, 57, 134)_{G24},
 (0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,
 27, 24, 38, 41, 40, 43, 63, 65, 4, 66, 8, 92)_{G25},
 (0, 28, 29, 30, 59, 60, 92, 66, 97, 131, 1, 4,
 2, 5, 61, 99, 106, 80, 47, 58, 115, 41, 120, 12)_{G25},
 (0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,
 27, 24, 38, 41, 40, 43, 62, 87, 4, 10, 66, 117)_{G26},
 (0, 27, 28, 29, 63, 64, 106, 68, 104, 67, 9, 3,
 8, 2, 109, 60, 51, 72, 103, 59, 37, 7, 105, 118)_{G26},
 (38, 59, 6, 110, 55, 3, 98, 16, 50, 63, 27, 130,
 53, 54, 12, 101, 34, 111, 89, 113, 105, 24, 71, 103)_{G27},
 (0, 1, 6, 7, 9, 10, 22, 17, 32, 48, 27, 37,
 61, 39, 81, 55, 85, 67, 130, 119, 120, 137, 36, 42)_{G27},
 (0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,
 27, 24, 38, 35, 45, 41, 4, 59, 7, 8, 70, 71)_{G28},
 (0, 28, 29, 32, 62, 64, 99, 68, 103, 137, 3, 4,
 2, 9, 45, 46, 81, 50, 53, 102, 92, 100, 12, 5)_{G28},
 (8, 18, 14, 110, 87, 35, 138, 67, 48, 66, 31, 126,
 102, 68, 95, 88, 84, 6, 39, 136, 29, 75, 38, 127)_{G29},
 (0, 2, 3, 5, 9, 10, 22, 14, 21, 36, 25, 34,
 51, 41, 49, 84, 116, 134, 102, 1, 79, 136, 20, 61)_{G29},
 (140, 124, 62, 10, 102, 24, 53, 98, 33, 85, 79, 30,
 7, 55, 50, 109, 41, 59, 11, 21, 67, 1, 32, 115)_{G30},
 (0, 1, 2, 3, 8, 9, 20, 12, 22, 53, 34, 35,
 47, 40, 81, 105, 73, 143, 139, 141, 21, 120, 58, 78)_{G30},
 (0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,
 32, 24, 40, 39, 57, 41, 4, 61, 7, 31, 66, 91)_{G31},
 (0, 29, 31, 32, 63, 64, 107, 71, 104, 68, 13, 1,
 113, 117, 37, 115, 67, 78, 49, 28, 86, 15, 139, 103)_{G31},

$(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $32, 24, 40, 39, 36, 41, 4, 62, 7, 10, 86, 44)_{G32},$
 $(0, 25, 29, 30, 58, 60, 110, 71, 101, 69, 104, 105,$
 $6, 1, 47, 8, 44, 16, 100, 83, 81, 99, 140, 23)_{G32},$
 $(115, 106, 13, 130, 77, 79, 140, 55, 38, 109, 33, 63,$
 $52, 116, 129, 51, 10, 22, 104, 35, 21, 15, 54, 26)_{G33},$
 $(0, 1, 2, 6, 9, 11, 26, 13, 41, 62, 33, 37,$
 $70, 47, 92, 102, 71, 110, 140, 107, 31, 24, 121, 44)_{G33},$
 $(51, 30, 107, 25, 55, 15, 63, 77, 84, 39, 96, 33,$
 $83, 81, 126, 99, 135, 94, 86, 59, 138, 36, 14, 61)_{G34},$
 $(0, 1, 2, 3, 8, 10, 18, 14, 31, 35, 29, 30,$
 $60, 48, 82, 76, 134, 138, 79, 117, 113, 16, 7, 61)_{G34},$
 $(56, 129, 21, 79, 81, 142, 86, 92, 29, 39, 14, 40,$
 $99, 120, 35, 59, 13, 9, 58, 118, 20, 25, 112, 143)_{G35},$
 $(0, 3, 4, 8, 12, 13, 23, 18, 38, 44, 28, 29,$
 $42, 45, 1, 82, 91, 113, 119, 102, 6, 25, 81, 73)_{G35},$
 $(0, 1, 2, 3, 5, 6, 11, 9, 13, 22, 18, 19,$
 $23, 24, 39, 40, 41, 43, 44, 60, 7, 4, 70, 88)_{G36},$
 $(0, 29, 30, 31, 61, 63, 99, 69, 102, 134, 1, 2,$
 $4, 9, 47, 46, 55, 96, 75, 95, 93, 133, 44, 25)_{G36},$
 $(6, 53, 130, 28, 121, 115, 9, 63, 76, 23, 43, 11,$
 $37, 132, 12, 104, 0, 1, 2, 3, 5, 7, 14, 20)_{G37},$
 $(0, 3, 6, 7, 15, 19, 32, 25, 42, 36, 44, 49,$
 $1, 79, 64, 110, 126, 88, 134, 114, 51, 22, 21, 85)_{G37}$
 and
 $(69, 86, 13, 120, 46, 112, 76, 133, 82, 141, 66, 94,$
 $84, 80, 129, 72, 1, 0, 3, 4, 7, 16, 17, 23)_{G38},$
 $(0, 3, 9, 11, 17, 18, 33, 32, 45, 38, 47, 49,$
 $1, 80, 69, 90, 138, 89, 136, 93, 51, 140, 10, 65)_{G38}$
 under the action of the mapping $x \mapsto x + 1 \pmod{145}$. □

B Proof of Lemma 2.3

Proof of Lemma 2.3. Recall that the lemma asserts the existence of decompositions of the complete multipartite graphs $K_{12,12,12}$, $K_{24,24,15}$, $K_{72,72,63}$, $K_{24,24,24,24}$ and $K_{24,24,24,21}$ for each of the thirty-eight 24-vertex non-trivial snarks.

Let the vertex set of $K_{12,12,12}$ be Z_{36} partitioned according to residue classes modulo 3. The decompositions consist of

$$\begin{aligned}
 &(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 19, 20, \\
 &29, 13, 27, 7, 15, 30, 17, 18, 28, 35, 16, 23)_{G1},
 \end{aligned}$$

$(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 19, 18,$
 $17, 16, 31, 35, 27, 33, 20, 12, 7, 32, 22, 26)_{G2},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 19, 8,$
 $32, 24, 34, 33, 15, 12, 7, 17, 29, 13, 28, 26)_{G3},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 19, 18,$
 $17, 30, 23, 8, 31, 27, 33, 16, 13, 28, 14, 26)_{G4},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 20,$
 $23, 33, 31, 15, 30, 22, 32, 28, 13, 17, 12, 8)_{G5},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 12, 20,$
 $31, 21, 28, 25, 8, 35, 29, 14, 24, 27, 13, 16)_{G6},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 20,$
 $34, 16, 23, 27, 12, 15, 17, 35, 33, 14, 22, 28)_{G7},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 12, 20,$
 $16, 30, 31, 28, 15, 27, 35, 14, 22, 29, 17, 13)_{G8},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 20,$
 $29, 16, 19, 30, 27, 24, 12, 17, 32, 8, 13, 31)_{G9},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 30,$
 $26, 34, 23, 35, 18, 16, 21, 25, 8, 20, 31, 33)_{G10},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 33,$
 $17, 27, 23, 25, 15, 20, 31, 24, 8, 13, 14, 34)_{G11},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 23,$
 $17, 33, 32, 28, 18, 22, 12, 24, 25, 14, 34, 8)_{G12},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 35,$
 $25, 16, 19, 31, 15, 20, 12, 8, 26, 27, 17, 33)_{G13},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 16, 7,$
 $25, 8, 30, 27, 35, 21, 14, 19, 17, 18, 34, 32)_{G14},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 16, 18,$
 $17, 30, 8, 32, 22, 31, 9, 12, 34, 35, 14, 25)_{G15},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 16, 12,$
 $25, 33, 35, 14, 17, 26, 9, 34, 7, 18, 31, 20)_{G16},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 16, 12,$
 $22, 25, 34, 29, 32, 20, 9, 33, 26, 13, 21, 23)_{G17},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 16, 7,$
 $17, 34, 8, 33, 23, 31, 30, 18, 29, 25, 9, 35)_{G18},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 16, 12,$
 $22, 34, 26, 17, 32, 29, 8, 30, 27, 31, 18, 13)_{G19},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 12, 7,$
 $34, 26, 28, 17, 33, 35, 9, 27, 16, 8, 13, 32)_{G20},$

$(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $22, 29, 26, 34, 32, 9, 28, 27, 14, 8, 18, 19)_{G21},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 24,$
 $22, 29, 8, 21, 23, 17, 16, 18, 13, 31, 12, 32)_{G22},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $34, 26, 28, 23, 31, 8, 21, 14, 9, 33, 32, 19)_{G23},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $25, 32, 31, 33, 34, 17, 13, 8, 18, 14, 29, 30)_{G24},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $16, 19, 26, 27, 34, 29, 32, 8, 13, 35, 9, 30)_{G25},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 16,$
 $28, 20, 8, 30, 32, 24, 9, 25, 22, 29, 12, 35)_{G26},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $22, 28, 20, 24, 29, 26, 9, 14, 21, 16, 31, 32)_{G27},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 19,$
 $22, 25, 8, 21, 35, 9, 30, 20, 31, 32, 18, 14)_{G28},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 12, 7,$
 $22, 19, 31, 26, 32, 8, 27, 14, 9, 17, 13, 30)_{G29},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $26, 16, 33, 32, 23, 34, 13, 24, 9, 22, 8, 14)_{G30},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 16,$
 $23, 34, 12, 20, 33, 17, 9, 24, 32, 13, 22, 35)_{G31},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 18,$
 $23, 25, 33, 8, 21, 17, 13, 12, 19, 31, 32, 14)_{G32},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $23, 29, 34, 25, 21, 31, 18, 9, 35, 20, 13, 32)_{G33},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $17, 32, 27, 29, 30, 28, 31, 9, 13, 8, 19, 35)_{G34},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 19,$
 $17, 25, 28, 8, 33, 35, 27, 12, 31, 14, 9, 26)_{G35},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 15, 7, 12,$
 $23, 22, 33, 20, 30, 34, 32, 8, 19, 13, 29, 9)_{G36},$
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 30,$
 $23, 25, 19, 32, 26, 33, 14, 16, 18, 35, 27, 34)_{G37}$
 and
 $(0, 1, 2, 4, 3, 5, 10, 6, 11, 9, 7, 30,$
 $23, 16, 34, 32, 31, 18, 8, 13, 33, 35, 14, 15)_{G38}$
 under the action of the mapping $x \mapsto x + 3 \pmod{36}$.

Let the vertex set of $K_{24,24,15}$ be $\{0, 1, \dots, 62\}$ partitioned into $\{2j + i : j = 0, 1, \dots, 23\}$, $i = 0, 1$, and $\{48, 49, \dots, 62\}$. The decompositions consist of

- (27, 22, 53, 48, 9, 33, 26, 12, 0, 16, 51, 23,
50, 37, 20, 54, 34, 10, 7, 4, 60, 5, 59, 47) $_{G1}$,
- (46, 15, 55, 21, 42, 4, 35, 37, 53, 26, 59, 61,
40, 5, 1, 8, 9, 14, 49, 52, 10, 6, 39, 23) $_{G1}$,
- (13, 60, 36, 53, 16, 0, 7, 3, 47, 46, 5, 61,
4, 57, 52, 9, 33, 44, 38, 62, 56, 18, 19, 23) $_{G1}$,
- (29, 30, 53, 12, 57, 5, 45, 18, 39, 21, 38, 26,
58, 24, 56, 23, 14, 51, 37, 55, 59, 3, 44, 16) $_{G2}$,
- (38, 15, 55, 43, 34, 53, 25, 0, 59, 2, 23, 60,
48, 21, 11, 12, 39, 61, 40, 41, 52, 4, 35, 46) $_{G2}$,
- (40, 39, 25, 54, 38, 49, 50, 22, 1, 20, 43, 18,
29, 28, 45, 51, 57, 62, 0, 47, 13, 34, 3, 8) $_{G2}$,
- (51, 45, 15, 8, 16, 6, 57, 53, 3, 47, 56, 29,
10, 0, 34, 40, 21, 13, 54, 58, 7, 52, 28, 38) $_{G3}$,
- (12, 57, 17, 31, 19, 21, 20, 8, 42, 55, 36, 58,
23, 27, 9, 5, 16, 51, 54, 10, 59, 22, 39, 37) $_{G3}$,
- (0, 61, 60, 59, 13, 38, 34, 9, 26, 35, 53, 50,
8, 23, 24, 7, 39, 29, 30, 22, 1, 2, 55, 62) $_{G3}$,
- (2, 45, 59, 3, 54, 18, 20, 35, 14, 16, 1, 25,
60, 23, 52, 48, 38, 40, 19, 61, 44, 17, 43, 6) $_{G4}$,
- (47, 26, 36, 49, 19, 29, 57, 54, 38, 43, 50, 27,
37, 15, 58, 9, 20, 12, 30, 48, 56, 28, 33, 45) $_{G4}$,
- (37, 38, 50, 46, 52, 58, 6, 36, 43, 17, 42, 39,
19, 0, 61, 55, 20, 4, 28, 1, 51, 2, 13, 57) $_{G4}$,
- (32, 48, 37, 21, 18, 13, 53, 26, 50, 52, 34, 11,
54, 0, 4, 27, 43, 51, 5, 42, 38, 58, 44, 39) $_{G5}$,
- (49, 0, 17, 31, 13, 47, 44, 18, 16, 36, 30, 55,
7, 51, 52, 3, 60, 6, 46, 24, 21, 27, 54, 57) $_{G5}$,
- (54, 5, 44, 37, 12, 20, 31, 3, 58, 18, 1, 52,
38, 47, 9, 56, 21, 8, 55, 30, 26, 61, 19, 33) $_{G5}$,
- (33, 34, 52, 50, 23, 35, 16, 10, 26, 4, 49, 31,
48, 45, 27, 12, 1, 30, 58, 54, 44, 18, 47, 41) $_{G6}$,
- (6, 45, 33, 15, 60, 2, 20, 56, 28, 52, 5, 37,
13, 51, 18, 4, 36, 39, 49, 47, 29, 57, 40, 8) $_{G6}$,
- (29, 52, 59, 20, 47, 2, 42, 15, 51, 9, 61, 53,
50, 7, 34, 8, 11, 4, 55, 19, 38, 26, 33, 58) $_{G6}$,
- (31, 58, 36, 0, 28, 18, 13, 7, 57, 51, 45, 44,
55, 5, 4, 49, 25, 16, 30, 48, 19, 10, 42, 29) $_{G7}$,

(57, 9, 46, 27, 22, 48, 3, 39, 56, 10, 37, 52,
 16, 38, 59, 28, 53, 17, 35, 55, 19, 60, 6, 2)_{G7},
 (14, 52, 5, 25, 21, 19, 51, 8, 18, 4, 56, 43,
 7, 49, 41, 42, 20, 0, 1, 3, 36, 15, 59, 60)_{G7},
 (29, 42, 18, 26, 55, 48, 27, 47, 25, 52, 32, 24,
 12, 0, 5, 37, 54, 49, 1, 7, 61, 38, 28, 51)_{G8},
 (18, 23, 49, 37, 32, 40, 17, 39, 53, 56, 21, 16,
 20, 26, 46, 28, 43, 57, 31, 27, 48, 52, 25, 42)_{G8},
 (61, 43, 23, 42, 30, 59, 60, 46, 25, 11, 33, 38,
 5, 34, 16, 62, 35, 50, 48, 13, 27, 55, 4, 0)_{G8},
 (46, 19, 33, 54, 44, 12, 48, 61, 1, 47, 3, 0,
 18, 10, 22, 60, 53, 52, 55, 21, 15, 5, 32, 2)_{G9},
 (4, 17, 60, 33, 53, 8, 9, 11, 18, 36, 51, 59,
 58, 50, 52, 42, 43, 30, 3, 5, 24, 27, 54, 10)_{G9},
 (52, 29, 40, 34, 12, 49, 27, 11, 33, 41, 24, 16,
 10, 56, 61, 9, 19, 39, 62, 42, 43, 20, 30, 21)_{G9},
 (39, 50, 28, 46, 9, 42, 59, 21, 53, 54, 37, 25,
 58, 15, 14, 23, 24, 6, 8, 22, 60, 48, 43, 19)_{G10},
 (33, 32, 55, 61, 7, 29, 2, 12, 4, 38, 40, 51,
 39, 47, 21, 50, 1, 28, 52, 14, 10, 49, 24, 43)_{G10},
 (59, 35, 24, 41, 28, 4, 58, 9, 52, 26, 43, 17,
 36, 7, 62, 13, 61, 14, 51, 57, 46, 6, 27, 5)_{G10},
 (53, 29, 35, 9, 60, 6, 14, 49, 44, 28, 21, 25,
 41, 59, 56, 47, 34, 52, 58, 55, 40, 3, 20, 33)_{G11},
 (45, 12, 6, 61, 58, 56, 47, 3, 46, 36, 34, 32,
 51, 53, 41, 59, 60, 35, 22, 31, 39, 26, 5, 30)_{G11},
 (29, 54, 34, 28, 30, 2, 15, 5, 57, 3, 27, 62,
 8, 13, 14, 12, 16, 11, 55, 52, 24, 40, 47, 41)_{G11},
 (45, 61, 36, 58, 41, 28, 55, 39, 6, 11, 13, 23,
 50, 19, 32, 4, 53, 57, 16, 35, 51, 2, 47, 12)_{G12},
 (49, 16, 29, 43, 11, 13, 22, 34, 44, 4, 8, 54,
 27, 21, 45, 25, 60, 28, 52, 26, 18, 56, 10, 48)_{G12},
 (12, 47, 25, 53, 26, 51, 55, 2, 3, 9, 15, 34,
 21, 54, 10, 59, 6, 1, 62, 52, 19, 36, 37, 38)_{G12},
 (52, 34, 25, 39, 35, 23, 16, 42, 60, 12, 0, 51,
 15, 43, 7, 55, 5, 49, 58, 6, 4, 59, 22, 33)_{G13},
 (11, 44, 12, 46, 37, 54, 56, 19, 51, 61, 41, 4,
 14, 6, 7, 23, 48, 52, 33, 39, 55, 57, 36, 28)_{G13},
 (49, 20, 17, 30, 55, 9, 14, 32, 25, 29, 44, 47,
 62, 10, 6, 42, 58, 45, 38, 41, 7, 53, 1, 24)_{G13},

(35, 22, 8, 18, 48, 61, 13, 56, 33, 54, 5, 4,
 16, 29, 42, 27, 25, 44, 17, 36, 12, 55, 57, 9)_{G14},
 (0, 52, 1, 54, 43, 22, 12, 8, 10, 15, 58, 29,
 5, 51, 31, 49, 2, 47, 24, 19, 3, 61, 60, 42)_{G14},
 (16, 54, 27, 35, 20, 38, 48, 18, 53, 42, 37, 39,
 9, 55, 50, 2, 30, 14, 24, 23, 52, 17, 11, 62)_{G14},
 (56, 6, 22, 21, 59, 35, 47, 58, 36, 53, 4, 18,
 20, 7, 3, 61, 60, 17, 24, 8, 15, 10, 52, 13)_{G15},
 (20, 50, 7, 37, 29, 22, 14, 12, 57, 59, 23, 33,
 27, 24, 8, 34, 56, 4, 1, 43, 9, 44, 48, 55)_{G15},
 (46, 59, 25, 52, 17, 31, 56, 44, 16, 43, 49, 10,
 3, 37, 53, 29, 6, 60, 14, 38, 22, 57, 9, 27)_{G15},
 (28, 43, 31, 19, 32, 8, 61, 48, 55, 40, 41, 33,
 20, 17, 51, 36, 52, 50, 30, 11, 0, 38, 29, 49)_{G16},
 (36, 31, 43, 9, 18, 58, 60, 49, 59, 46, 29, 24,
 8, 17, 57, 16, 13, 7, 41, 47, 38, 55, 10, 56)_{G16},
 (45, 26, 18, 4, 57, 35, 23, 53, 21, 52, 34, 6,
 7, 14, 39, 29, 56, 30, 20, 42, 33, 31, 54, 58)_{G16},
 (16, 17, 31, 7, 53, 18, 32, 50, 46, 61, 5, 37,
 35, 43, 34, 51, 40, 56, 4, 0, 58, 9, 29, 59)_{G17},
 (37, 12, 14, 46, 31, 21, 52, 45, 56, 15, 16, 54,
 4, 20, 28, 39, 22, 53, 11, 47, 60, 48, 33, 26)_{G17},
 (45, 24, 49, 12, 37, 52, 22, 7, 57, 55, 6, 35,
 54, 41, 42, 1, 30, 18, 3, 60, 14, 62, 43, 0)_{G17},
 (45, 38, 48, 16, 7, 51, 24, 10, 55, 9, 25, 22,
 21, 14, 54, 52, 41, 26, 34, 27, 43, 36, 50, 56)_{G18},
 (39, 42, 20, 52, 33, 48, 56, 50, 16, 43, 13, 4,
 30, 19, 49, 36, 3, 35, 15, 28, 54, 25, 14, 58)_{G18},
 (23, 28, 46, 12, 7, 54, 58, 25, 60, 47, 42, 13,
 2, 29, 56, 45, 0, 52, 43, 30, 20, 40, 21, 62)_{G18},
 (50, 43, 36, 13, 24, 12, 31, 9, 59, 10, 56, 57,
 48, 20, 5, 29, 11, 26, 25, 2, 30, 54, 34, 35)_{G19},
 (23, 58, 48, 59, 28, 44, 43, 29, 3, 46, 57, 61,
 40, 16, 5, 27, 19, 22, 41, 50, 18, 60, 30, 35)_{G19},
 (27, 34, 24, 61, 55, 5, 21, 3, 12, 6, 52, 20,
 54, 29, 48, 30, 62, 19, 0, 13, 10, 28, 41, 56)_{G19},
 (31, 53, 8, 46, 3, 12, 58, 33, 61, 5, 47, 55,
 0, 4, 22, 21, 2, 49, 17, 57, 41, 56, 37, 6)_{G20},
 (22, 41, 25, 35, 18, 60, 50, 61, 59, 24, 23, 34,
 38, 16, 54, 39, 15, 47, 9, 46, 44, 42, 52, 53)_{G20},

(26, 53, 23, 5, 17, 42, 22, 32, 16, 59, 31, 11,
 37, 57, 0, 51, 55, 40, 29, 27, 39, 20, 62, 12)_{G20},
 (11, 44, 58, 40, 5, 1, 32, 17, 56, 9, 59, 54,
 26, 46, 12, 15, 0, 19, 55, 41, 2, 51, 47, 61)_{G21},
 (37, 34, 36, 26, 21, 50, 55, 43, 59, 15, 33, 38,
 42, 18, 40, 47, 53, 25, 57, 52, 48, 8, 35, 30)_{G21},
 (53, 44, 33, 36, 31, 29, 26, 34, 49, 47, 57, 52,
 15, 19, 4, 46, 11, 32, 51, 55, 21, 41, 14, 8)_{G21},
 (13, 55, 6, 61, 40, 47, 33, 43, 31, 8, 22, 50,
 2, 52, 27, 25, 17, 15, 20, 48, 44, 30, 53, 19)_{G22},
 (29, 46, 58, 28, 7, 17, 40, 1, 59, 37, 52, 0,
 36, 38, 49, 33, 48, 39, 51, 42, 34, 60, 4, 9)_{G22},
 (54, 33, 14, 1, 0, 44, 56, 19, 52, 10, 3, 57,
 18, 49, 43, 61, 15, 35, 38, 22, 36, 9, 4, 60)_{G22},
 (31, 12, 48, 16, 56, 17, 29, 47, 43, 60, 58, 59,
 14, 38, 10, 40, 11, 52, 9, 49, 50, 1, 8, 18)_{G23},
 (58, 42, 44, 11, 56, 33, 25, 31, 34, 46, 8, 26,
 51, 61, 9, 49, 1, 4, 37, 40, 12, 5, 2, 35)_{G23},
 (21, 55, 60, 0, 38, 28, 11, 3, 7, 57, 39, 19,
 10, 2, 20, 52, 49, 25, 48, 62, 35, 1, 4, 30)_{G23},
 (10, 27, 17, 45, 53, 48, 32, 61, 18, 56, 19, 34,
 47, 28, 5, 6, 50, 37, 60, 30, 24, 15, 41, 57)_{G24},
 (3, 46, 40, 59, 52, 45, 19, 11, 18, 24, 14, 49,
 56, 50, 54, 39, 5, 30, 15, 16, 27, 8, 28, 31)_{G24},
 (54, 19, 29, 18, 46, 34, 53, 36, 9, 33, 23, 51,
 48, 62, 28, 20, 6, 0, 16, 1, 50, 17, 25, 52)_{G24},
 (52, 41, 40, 34, 14, 22, 47, 60, 9, 53, 43, 11,
 20, 30, 8, 57, 55, 2, 3, 29, 1, 44, 61, 51)_{G25},
 (42, 45, 7, 58, 10, 44, 54, 49, 21, 13, 41, 47,
 14, 35, 57, 12, 18, 30, 11, 61, 16, 33, 50, 31)_{G25},
 (57, 35, 34, 12, 42, 10, 25, 60, 53, 56, 15, 49,
 1, 11, 20, 48, 5, 8, 36, 32, 54, 28, 47, 17)_{G25},
 (32, 58, 55, 3, 2, 6, 21, 25, 51, 42, 47, 29,
 22, 14, 53, 59, 30, 8, 57, 35, 5, 15, 54, 56)_{G26},
 (7, 20, 18, 30, 5, 13, 55, 31, 51, 35, 22, 52,
 0, 40, 50, 37, 34, 39, 49, 45, 36, 6, 3, 57)_{G26},
 (39, 50, 10, 48, 20, 18, 45, 11, 23, 44, 25, 13,
 0, 12, 57, 58, 32, 24, 27, 56, 28, 41, 49, 37)_{G26},
 (9, 4, 28, 40, 50, 49, 37, 7, 15, 59, 2, 31,
 56, 26, 11, 60, 58, 12, 23, 41, 44, 19, 61, 57)_{G27},

(52, 0, 22, 47, 31, 39, 50, 54, 14, 36, 44, 2,
 17, 26, 58, 51, 27, 7, 24, 1, 13, 34, 42, 57)_{G27},
 (11, 24, 49, 12, 21, 13, 0, 33, 55, 25, 26, 30,
 6, 34, 48, 37, 27, 56, 58, 62, 8, 46, 9, 41)_{G27},
 (17, 48, 34, 56, 2, 37, 41, 9, 13, 42, 61, 54,
 8, 6, 15, 4, 33, 35, 58, 7, 60, 57, 44, 36)_{G28},
 (47, 2, 49, 30, 61, 27, 20, 34, 19, 39, 40, 51,
 60, 1, 58, 35, 28, 22, 41, 8, 38, 59, 9, 55)_{G28},
 (21, 24, 4, 12, 37, 31, 60, 35, 57, 23, 18, 40,
 6, 30, 62, 5, 15, 54, 47, 52, 9, 10, 48, 32)_{G28},
 (4, 35, 43, 31, 50, 34, 46, 26, 24, 59, 9, 19,
 61, 57, 41, 44, 30, 55, 23, 27, 32, 0, 1, 53)_{G29},
 (13, 55, 50, 34, 18, 36, 5, 30, 33, 61, 21, 23,
 49, 3, 26, 32, 46, 4, 48, 22, 53, 31, 9, 57)_{G29},
 (48, 1, 38, 29, 6, 46, 47, 21, 57, 32, 11, 37,
 0, 40, 4, 51, 61, 49, 39, 62, 5, 59, 15, 12)_{G29},
 (17, 40, 59, 30, 60, 19, 3, 25, 31, 48, 61, 36,
 32, 10, 56, 22, 57, 27, 29, 47, 39, 46, 58, 28)_{G30},
 (26, 60, 33, 9, 23, 46, 28, 50, 14, 53, 31, 11,
 16, 10, 39, 8, 6, 49, 57, 29, 51, 45, 18, 40)_{G30},
 (47, 56, 26, 12, 14, 21, 25, 54, 49, 50, 4, 36,
 7, 0, 13, 5, 53, 9, 10, 29, 44, 3, 52, 57)_{G30},
 (2, 45, 19, 31, 54, 59, 30, 32, 20, 53, 18, 3,
 1, 60, 33, 11, 28, 52, 26, 23, 55, 27, 13, 61)_{G31},
 (52, 22, 45, 30, 54, 50, 36, 26, 39, 55, 40, 42,
 47, 27, 12, 11, 57, 41, 59, 14, 13, 24, 8, 5)_{G31},
 (16, 7, 56, 52, 22, 30, 33, 14, 29, 36, 45, 58,
 51, 11, 8, 61, 19, 9, 20, 6, 1, 24, 53, 48)_{G31},
 (16, 54, 61, 33, 15, 34, 38, 27, 10, 58, 5, 60,
 44, 8, 19, 41, 20, 25, 57, 49, 0, 50, 45, 35)_{G32},
 (23, 6, 38, 44, 27, 19, 57, 56, 60, 17, 20, 24,
 33, 28, 35, 61, 1, 58, 42, 3, 34, 18, 59, 45)_{G32},
 (18, 52, 7, 57, 8, 33, 58, 4, 45, 16, 46, 26,
 43, 19, 53, 21, 49, 41, 42, 56, 22, 40, 3, 50)_{G32},
 (17, 26, 28, 48, 11, 53, 57, 13, 44, 39, 10, 1,
 55, 59, 45, 38, 31, 46, 0, 41, 52, 51, 34, 27)_{G33},
 (26, 31, 1, 50, 36, 55, 57, 40, 17, 19, 5, 14,
 56, 51, 2, 48, 6, 27, 37, 35, 4, 59, 43, 18)_{G33},
 (52, 13, 40, 18, 34, 6, 3, 15, 54, 51, 1, 37,
 28, 55, 8, 32, 24, 20, 21, 4, 59, 23, 31, 58)_{G33},

(14, 1, 53, 13, 49, 16, 29, 20, 22, 0, 55, 27,
 15, 9, 5, 60, 33, 26, 51, 2, 52, 36, 56, 32)_{G34},
 (14, 43, 55, 11, 4, 50, 1, 0, 53, 46, 26, 39,
 41, 56, 42, 31, 58, 61, 36, 45, 34, 54, 57, 5)_{G34},
 (29, 6, 4, 59, 1, 33, 58, 39, 44, 47, 12, 22,
 62, 34, 3, 16, 31, 43, 52, 27, 11, 42, 28, 49)_{G34},
 (15, 40, 59, 50, 17, 58, 28, 21, 16, 11, 14, 13,
 38, 36, 31, 49, 5, 56, 53, 52, 24, 44, 23, 29)_{G35},
 (40, 21, 5, 47, 49, 22, 46, 30, 28, 61, 17, 43,
 60, 50, 25, 38, 44, 8, 32, 14, 9, 35, 52, 56)_{G35},
 (33, 60, 54, 61, 27, 17, 10, 31, 32, 19, 14, 0,
 46, 18, 58, 53, 43, 62, 41, 7, 11, 57, 34, 6)_{G35},
 (30, 45, 23, 53, 59, 2, 18, 49, 10, 3, 60, 47,
 8, 7, 35, 28, 6, 58, 4, 44, 51, 5, 0, 33)_{G36},
 (8, 54, 33, 55, 40, 21, 57, 46, 23, 37, 53, 56,
 61, 48, 2, 24, 25, 31, 17, 19, 27, 34, 52, 20)_{G36},
 (30, 61, 49, 9, 16, 3, 33, 27, 55, 24, 32, 42,
 40, 14, 7, 57, 25, 13, 23, 62, 41, 50, 38, 34)_{G36},
 (20, 52, 19, 39, 41, 11, 60, 53, 16, 22, 6, 49,
 0, 21, 18, 3, 45, 55, 29, 24, 50, 61, 48, 30)_{G37},
 (15, 38, 12, 60, 57, 47, 25, 45, 42, 9, 26, 4,
 28, 59, 58, 49, 30, 17, 39, 56, 7, 11, 43, 0)_{G37},
 (28, 52, 11, 48, 27, 31, 26, 22, 34, 20, 61, 16,
 21, 5, 56, 29, 49, 40, 9, 33, 14, 32, 30, 62)_{G37}

and

(3, 22, 58, 36, 49, 57, 32, 26, 31, 25, 13, 24,
 29, 50, 43, 12, 60, 4, 53, 41, 56, 42, 46, 21)_{G38},
 (1, 46, 61, 56, 50, 17, 47, 42, 16, 23, 12, 59,
 8, 15, 3, 49, 20, 43, 10, 37, 27, 2, 26, 41)_{G38},
 (21, 14, 50, 36, 53, 48, 39, 24, 17, 15, 33, 40,
 57, 52, 62, 10, 56, 18, 3, 49, 43, 37, 6, 44)_{G38}

under the action of the mapping $x \mapsto x + 4 \pmod{48}$ for $x < 48$, $x \mapsto 48 + (x - 48 + 5 \pmod{15})$ for $x \geq 48$.

Let the vertex set of $K_{72,72,63}$ be $\{0, 1, \dots, 206\}$ partitioned into $\{2j+i : j = 0, 1, \dots, 71\}$, $i = 0, 1$, and $\{144, 145, \dots, 206\}$. The decompositions consist of

(42, 173, 182, 189, 138, 48, 139, 101, 31, 135, 146, 50,
 180, 52, 108, 123, 113, 193, 119, 12, 26, 199, 76, 95)_{G1},
 (43, 174, 185, 192, 139, 49, 140, 102, 32, 136, 147, 51,
 183, 53, 109, 124, 114, 196, 120, 13, 27, 202, 77, 96)_{G1},
 (44, 175, 188, 195, 140, 50, 141, 103, 33, 137, 148, 52,
 186, 54, 110, 125, 115, 199, 121, 14, 28, 205, 78, 97)_{G1},

(45, 176, 191, 198, 141, 51, 142, 104, 34, 138, 149, 53,
 189, 55, 111, 126, 116, 202, 122, 15, 29, 181, 79, 98)_{G1},
 (121, 148, 200, 155, 34, 22, 101, 87, 37, 125, 180, 199,
 96, 169, 63, 28, 197, 93, 70, 67, 53, 94, 178, 158)_{G1},
 (122, 149, 203, 156, 35, 23, 102, 88, 38, 126, 183, 202,
 97, 170, 64, 29, 200, 94, 71, 68, 54, 95, 179, 159)_{G1},
 (123, 150, 206, 157, 36, 24, 103, 89, 39, 127, 186, 205,
 98, 171, 65, 30, 203, 95, 72, 69, 55, 96, 144, 160)_{G1},
 (124, 151, 182, 158, 37, 25, 104, 90, 40, 128, 189, 181,
 99, 172, 66, 31, 206, 96, 73, 70, 56, 97, 145, 161)_{G1},
 (30, 143, 146, 133, 164, 80, 96, 85, 84, 92, 167, 173,
 40, 35, 67, 44, 176, 168, 38, 91, 135, 46, 87, 116)_{G1},
 (164, 125, 77, 25, 10, 30, 170, 177, 149, 72, 53, 103,
 61, 142, 78, 146, 32, 156, 91, 118, 171, 113, 136, 5)_{G1},
 (77, 169, 154, 145, 0, 118, 115, 73, 131, 15, 174, 134,
 48, 163, 8, 111, 61, 39, 121, 106, 74, 147, 102, 167)_{G1},
 (14, 154, 39, 111, 64, 3, 181, 46, 148, 183, 134, 33,
 176, 113, 56, 155, 55, 197, 73, 124, 94, 171, 12, 17)_{G2},
 (15, 155, 40, 112, 65, 4, 184, 47, 149, 186, 135, 34,
 177, 114, 57, 156, 56, 200, 74, 125, 95, 172, 13, 18)_{G2},
 (16, 156, 41, 113, 66, 5, 187, 48, 150, 189, 136, 35,
 178, 115, 58, 157, 57, 203, 75, 126, 96, 173, 14, 19)_{G2},
 (17, 157, 42, 114, 67, 6, 190, 49, 151, 192, 137, 36,
 179, 116, 59, 158, 58, 206, 76, 127, 97, 174, 15, 20)_{G2},
 (157, 132, 91, 30, 129, 166, 60, 2, 162, 164, 128, 148,
 59, 14, 119, 95, 32, 198, 161, 202, 61, 105, 12, 56)_{G2},
 (158, 133, 92, 31, 130, 167, 61, 3, 163, 165, 129, 149,
 60, 15, 120, 96, 33, 201, 162, 205, 62, 106, 13, 57)_{G2},
 (159, 134, 93, 32, 131, 168, 62, 4, 164, 166, 130, 150,
 61, 16, 121, 97, 34, 204, 163, 181, 63, 107, 14, 58)_{G2},
 (160, 135, 94, 33, 132, 169, 63, 5, 165, 167, 131, 151,
 62, 17, 122, 98, 35, 180, 164, 184, 64, 108, 15, 59)_{G2},
 (161, 50, 66, 43, 183, 196, 85, 7, 32, 201, 97, 120,
 174, 135, 55, 179, 128, 86, 14, 104, 79, 200, 5, 191)_{G2},
 (25, 156, 36, 134, 9, 2, 197, 55, 203, 119, 199, 47,
 20, 21, 110, 132, 73, 6, 181, 189, 32, 138, 5, 97)_{G2},
 (186, 86, 92, 15, 182, 200, 33, 11, 24, 194, 10, 118,
 64, 73, 77, 119, 49, 122, 96, 191, 193, 112, 111, 103)_{G2},
 (41, 138, 70, 164, 171, 166, 33, 95, 63, 25, 48, 152,
 147, 169, 56, 27, 7, 38, 4, 23, 121, 180, 18, 109)_{G3},
 (42, 139, 71, 165, 172, 167, 34, 96, 64, 26, 49, 153,
 148, 170, 57, 28, 8, 39, 5, 24, 122, 183, 19, 110)_{G3},

(43, 140, 72, 166, 173, 168, 35, 97, 65, 27, 50, 154,
 149, 171, 58, 29, 9, 40, 6, 25, 123, 186, 20, 111) $_{G3}$,
 (44, 141, 73, 167, 174, 169, 36, 98, 66, 28, 51, 155,
 150, 172, 59, 30, 10, 41, 7, 26, 124, 189, 21, 112) $_{G3}$,
 (92, 99, 125, 3, 14, 176, 148, 98, 184, 66, 101, 56,
 174, 108, 147, 155, 52, 53, 193, 169, 140, 71, 39, 4) $_{G3}$,
 (93, 100, 126, 4, 15, 177, 149, 99, 187, 67, 102, 57,
 175, 109, 148, 156, 53, 54, 196, 170, 141, 72, 40, 5) $_{G3}$,
 (94, 101, 127, 5, 16, 178, 150, 100, 190, 68, 103, 58,
 176, 110, 149, 157, 54, 55, 199, 171, 142, 73, 41, 6) $_{G3}$,
 (95, 102, 128, 6, 17, 179, 151, 101, 193, 69, 104, 59,
 177, 111, 150, 158, 55, 56, 202, 172, 143, 74, 42, 7) $_{G3}$,
 (180, 15, 65, 128, 181, 191, 118, 110, 109, 111, 92, 192,
 193, 194, 102, 47, 68, 28, 11, 85, 45, 138, 198, 182) $_{G3}$,
 (13, 202, 12, 30, 71, 104, 191, 21, 195, 113, 204, 3,
 112, 8, 96, 2, 59, 103, 189, 197, 141, 194, 142, 122) $_{G3}$,
 (187, 99, 98, 9, 6, 197, 188, 11, 183, 206, 49, 75,
 138, 51, 76, 30, 129, 203, 201, 112, 25, 191, 182, 32) $_{G3}$,
 (187, 125, 23, 1, 12, 76, 144, 186, 150, 182, 85, 94,
 65, 55, 71, 90, 3, 82, 153, 154, 56, 171, 176, 114) $_{G4}$,
 (190, 126, 24, 2, 13, 77, 145, 189, 151, 185, 86, 95,
 66, 56, 72, 91, 4, 83, 154, 155, 57, 172, 177, 115) $_{G4}$,
 (193, 127, 25, 3, 14, 78, 146, 192, 152, 188, 87, 96,
 67, 57, 73, 92, 5, 84, 155, 156, 58, 173, 178, 116) $_{G4}$,
 (196, 128, 26, 4, 15, 79, 147, 195, 153, 191, 88, 97,
 68, 58, 74, 93, 6, 85, 156, 157, 59, 174, 179, 117) $_{G4}$,
 (148, 3, 122, 23, 58, 108, 143, 71, 165, 164, 133, 161,
 175, 114, 45, 153, 79, 61, 12, 180, 41, 38, 76, 113) $_{G4}$,
 (149, 4, 123, 24, 59, 109, 0, 72, 166, 165, 134, 162,
 176, 115, 46, 154, 80, 62, 13, 183, 42, 39, 77, 114) $_{G4}$,
 (150, 5, 124, 25, 60, 110, 1, 73, 167, 166, 135, 163,
 177, 116, 47, 155, 81, 63, 14, 186, 43, 40, 78, 115) $_{G4}$,
 (151, 6, 125, 26, 61, 111, 2, 74, 168, 167, 136, 164,
 178, 117, 48, 156, 82, 64, 15, 189, 44, 41, 79, 116) $_{G4}$,
 (77, 10, 202, 36, 203, 89, 45, 116, 135, 63, 205, 86,
 127, 94, 182, 111, 190, 180, 66, 31, 33, 34, 100, 185) $_{G4}$,
 (120, 101, 139, 184, 36, 201, 203, 74, 69, 100, 17, 121,
 93, 24, 194, 4, 195, 187, 138, 135, 91, 137, 78, 202) $_{G4}$,
 (186, 55, 46, 132, 22, 96, 33, 184, 85, 71, 191, 185,
 38, 4, 82, 64, 143, 65, 193, 206, 135, 127, 18, 80) $_{G4}$,
 (117, 161, 193, 36, 55, 98, 96, 53, 158, 125, 41, 167,
 191, 119, 166, 78, 93, 88, 133, 150, 60, 66, 162, 21) $_{G5}$,

(118, 162, 196, 37, 56, 99, 97, 54, 159, 126, 42, 168,
 194, 120, 167, 79, 94, 89, 134, 151, 61, 67, 163, 22)_{G5},
 (119, 163, 199, 38, 57, 100, 98, 55, 160, 127, 43, 169,
 197, 121, 168, 80, 95, 90, 135, 152, 62, 68, 164, 23)_{G5},
 (120, 164, 202, 39, 58, 101, 99, 56, 161, 128, 44, 170,
 200, 122, 169, 81, 96, 91, 136, 153, 63, 69, 165, 24)_{G5},
 (39, 130, 28, 10, 139, 129, 158, 176, 148, 179, 175, 126,
 89, 92, 48, 41, 200, 197, 97, 198, 112, 73, 116, 15)_{G5},
 (40, 131, 29, 11, 140, 130, 159, 177, 149, 144, 176, 127,
 90, 93, 49, 42, 203, 200, 98, 201, 113, 74, 117, 16)_{G5},
 (41, 132, 30, 12, 141, 131, 160, 178, 150, 145, 177, 128,
 91, 94, 50, 43, 206, 203, 99, 204, 114, 75, 118, 17)_{G5},
 (42, 133, 31, 13, 142, 132, 161, 179, 151, 146, 178, 129,
 92, 95, 51, 44, 182, 206, 100, 180, 115, 76, 119, 18)_{G5},
 (151, 108, 42, 15, 85, 205, 202, 25, 136, 66, 124, 89,
 50, 71, 195, 137, 115, 181, 34, 54, 192, 199, 51, 133)_{G5},
 (166, 123, 66, 57, 110, 160, 196, 117, 195, 22, 96, 17,
 130, 47, 190, 91, 95, 140, 129, 204, 70, 112, 186, 1)_{G5},
 (47, 68, 192, 60, 204, 7, 18, 92, 135, 190, 2, 87,
 117, 100, 64, 125, 96, 193, 173, 189, 37, 71, 94, 112)_{G5},
 (39, 56, 140, 158, 37, 59, 148, 144, 70, 8, 118, 71,
 98, 31, 150, 205, 107, 195, 6, 142, 172, 161, 5, 63)_{G6},
 (40, 57, 141, 159, 38, 60, 149, 145, 71, 9, 119, 72,
 99, 32, 151, 181, 108, 198, 7, 143, 173, 162, 6, 64)_{G6},
 (41, 58, 142, 160, 39, 61, 150, 146, 72, 10, 120, 73,
 100, 33, 152, 184, 109, 201, 8, 0, 174, 163, 7, 65)_{G6},
 (42, 59, 143, 161, 40, 62, 151, 147, 73, 11, 121, 74,
 101, 34, 153, 187, 110, 204, 9, 1, 175, 164, 8, 66)_{G6},
 (58, 79, 150, 7, 48, 72, 19, 45, 183, 192, 47, 90,
 191, 53, 104, 196, 94, 18, 171, 26, 105, 190, 73, 169)_{G6},
 (59, 80, 151, 8, 49, 73, 20, 46, 186, 195, 48, 91,
 194, 54, 105, 199, 95, 19, 172, 27, 106, 193, 74, 170)_{G6},
 (60, 81, 152, 9, 50, 74, 21, 47, 189, 198, 49, 92,
 197, 55, 106, 202, 96, 20, 173, 28, 107, 196, 75, 171)_{G6},
 (61, 82, 153, 10, 51, 75, 22, 48, 192, 201, 50, 93,
 200, 56, 107, 205, 97, 21, 174, 29, 108, 199, 76, 172)_{G6},
 (9, 4, 144, 155, 53, 17, 58, 70, 98, 20, 182, 111,
 21, 179, 115, 74, 191, 92, 40, 51, 3, 10, 139, 194)_{G6},
 (163, 67, 138, 38, 128, 54, 143, 17, 203, 25, 101, 157,
 78, 127, 158, 4, 139, 152, 134, 133, 182, 148, 59, 92)_{G6},
 (135, 32, 38, 4, 27, 197, 173, 53, 150, 73, 134, 12,
 16, 61, 206, 35, 137, 130, 52, 170, 194, 84, 145, 89)_{G6},

(105, 118, 70, 54, 21, 31, 172, 157, 161, 154, 197, 130,
 75, 66, 2, 23, 148, 142, 109, 186, 57, 72, 36, 201)_{G7},
 (106, 119, 71, 55, 22, 32, 173, 158, 162, 155, 200, 131,
 76, 67, 3, 24, 149, 143, 110, 189, 58, 73, 37, 204)_{G7},
 (107, 120, 72, 56, 23, 33, 174, 159, 163, 156, 203, 132,
 77, 68, 4, 25, 150, 0, 111, 192, 59, 74, 38, 180)_{G7},
 (108, 121, 73, 57, 24, 34, 175, 160, 164, 157, 206, 133,
 78, 69, 5, 26, 151, 1, 112, 195, 60, 75, 39, 183)_{G7},
 (154, 37, 106, 53, 100, 110, 77, 101, 158, 114, 146, 170,
 150, 16, 49, 84, 40, 95, 43, 183, 148, 59, 9, 26)_{G7},
 (155, 38, 107, 54, 101, 111, 78, 102, 159, 115, 147, 171,
 151, 17, 50, 85, 41, 96, 44, 186, 149, 60, 10, 27)_{G7},
 (156, 39, 108, 55, 102, 112, 79, 103, 160, 116, 148, 172,
 152, 18, 51, 86, 42, 97, 45, 189, 150, 61, 11, 28)_{G7},
 (157, 40, 109, 56, 103, 113, 80, 104, 161, 117, 149, 173,
 153, 19, 52, 87, 43, 98, 46, 192, 151, 62, 12, 29)_{G7},
 (18, 167, 25, 205, 43, 84, 184, 202, 32, 132, 185, 121,
 46, 187, 93, 30, 45, 182, 130, 85, 54, 196, 200, 39)_{G7},
 (60, 148, 113, 19, 137, 143, 199, 102, 184, 174, 52, 86,
 43, 111, 97, 182, 50, 190, 181, 104, 96, 37, 185, 18)_{G7},
 (65, 84, 200, 72, 182, 125, 31, 22, 91, 196, 193, 76,
 121, 197, 140, 75, 173, 199, 60, 43, 35, 74, 54, 119)_{G7},
 (183, 18, 29, 33, 101, 180, 28, 78, 204, 169, 49, 125,
 99, 37, 108, 52, 144, 70, 178, 158, 140, 135, 1, 112)_{G8},
 (186, 19, 30, 34, 102, 183, 29, 79, 180, 170, 50, 126,
 100, 38, 109, 53, 145, 71, 179, 159, 141, 136, 2, 113)_{G8},
 (189, 20, 31, 35, 103, 186, 30, 80, 183, 171, 51, 127,
 101, 39, 110, 54, 146, 72, 144, 160, 142, 137, 3, 114)_{G8},
 (192, 21, 32, 36, 104, 189, 31, 81, 186, 172, 52, 128,
 102, 40, 111, 55, 147, 73, 145, 161, 143, 138, 4, 115)_{G8},
 (139, 150, 171, 124, 2, 83, 13, 64, 146, 172, 170, 66,
 101, 11, 131, 133, 194, 158, 20, 98, 161, 18, 24, 184)_{G8},
 (140, 151, 172, 125, 3, 84, 14, 65, 147, 173, 171, 67,
 102, 12, 132, 134, 197, 159, 21, 99, 162, 19, 25, 187)_{G8},
 (141, 152, 173, 126, 4, 85, 15, 66, 148, 174, 172, 68,
 103, 13, 133, 135, 200, 160, 22, 100, 163, 20, 26, 190)_{G8},
 (142, 153, 174, 127, 5, 86, 16, 67, 149, 175, 173, 69,
 104, 14, 134, 136, 203, 161, 23, 101, 164, 21, 27, 193)_{G8},
 (178, 124, 119, 17, 23, 203, 197, 8, 190, 0, 70, 77,
 15, 132, 137, 5, 116, 184, 199, 13, 89, 185, 50, 30)_{G8},
 (191, 61, 127, 45, 18, 86, 144, 145, 181, 188, 93, 85,
 56, 68, 126, 147, 94, 65, 31, 196, 184, 27, 52, 70)_{G8},

(125, 193, 138, 80, 90, 70, 11, 200, 1, 35, 15, 2,
 7, 56, 22, 92, 203, 96, 16, 135, 197, 47, 79, 196)_{G8},
 (35, 146, 160, 52, 17, 19, 122, 54, 176, 187, 0, 59,
 185, 99, 138, 203, 113, 140, 83, 171, 92, 109, 153, 106)_{G9},
 (36, 147, 161, 53, 18, 20, 123, 55, 177, 190, 1, 60,
 188, 100, 139, 206, 114, 141, 84, 172, 93, 110, 154, 107)_{G9},
 (37, 148, 162, 54, 19, 21, 124, 56, 178, 193, 2, 61,
 191, 101, 140, 182, 115, 142, 85, 173, 94, 111, 155, 108)_{G9},
 (38, 149, 163, 55, 20, 22, 125, 57, 179, 196, 3, 62,
 194, 102, 141, 185, 116, 143, 86, 174, 95, 112, 156, 109)_{G9},
 (120, 63, 146, 135, 184, 187, 100, 42, 84, 194, 62, 121,
 53, 13, 109, 158, 178, 102, 145, 180, 46, 108, 143, 7)_{G9},
 (121, 64, 147, 136, 187, 190, 101, 43, 85, 197, 63, 122,
 54, 14, 110, 159, 179, 103, 146, 183, 47, 109, 0, 8)_{G9},
 (122, 65, 148, 137, 190, 193, 102, 44, 86, 200, 64, 123,
 55, 15, 111, 160, 144, 104, 147, 186, 48, 110, 1, 9)_{G9},
 (123, 66, 149, 138, 193, 196, 103, 45, 87, 203, 65, 124,
 56, 16, 112, 161, 145, 105, 148, 189, 49, 111, 2, 10)_{G9},
 (44, 159, 123, 39, 112, 59, 166, 180, 170, 186, 14, 85,
 36, 142, 26, 192, 103, 63, 119, 153, 164, 109, 116, 2)_{G9},
 (130, 178, 186, 153, 100, 131, 55, 70, 23, 33, 179, 140,
 75, 102, 116, 49, 89, 6, 189, 43, 13, 144, 168, 30)_{G9},
 (153, 108, 3, 125, 33, 201, 92, 40, 46, 112, 135, 13,
 204, 1, 195, 82, 60, 142, 25, 151, 78, 109, 137, 20)_{G9},
 (48, 81, 139, 203, 12, 152, 193, 10, 95, 119, 20, 27,
 164, 171, 161, 78, 178, 205, 18, 69, 141, 52, 41, 56)_{G10},
 (49, 82, 140, 206, 13, 153, 196, 11, 96, 120, 21, 28,
 165, 172, 162, 79, 179, 181, 19, 70, 142, 53, 42, 57)_{G10},
 (50, 83, 141, 182, 14, 154, 199, 12, 97, 121, 22, 29,
 166, 173, 163, 80, 144, 184, 20, 71, 143, 54, 43, 58)_{G10},
 (51, 84, 142, 185, 15, 155, 202, 13, 98, 122, 23, 30,
 167, 174, 164, 81, 145, 187, 21, 72, 0, 55, 44, 59)_{G10},
 (168, 125, 33, 21, 144, 132, 76, 149, 72, 174, 83, 173,
 26, 81, 44, 53, 180, 28, 146, 193, 18, 82, 79, 105)_{G10},
 (169, 126, 34, 22, 145, 133, 77, 150, 73, 175, 84, 174,
 27, 82, 45, 54, 183, 29, 147, 196, 19, 83, 80, 106)_{G10},
 (170, 127, 35, 23, 146, 134, 78, 151, 74, 176, 85, 175,
 28, 83, 46, 55, 186, 30, 148, 199, 20, 84, 81, 107)_{G10},
 (171, 128, 36, 24, 147, 135, 79, 152, 75, 177, 86, 176,
 29, 84, 47, 56, 189, 31, 149, 202, 21, 85, 82, 108)_{G10},
 (90, 61, 43, 125, 56, 151, 185, 74, 188, 192, 27, 49,
 55, 111, 22, 126, 189, 204, 180, 110, 140, 182, 120, 75)_{G10},

(91, 56, 20, 60, 169, 103, 117, 144, 115, 150, 183, 136,
 90, 8, 37, 98, 25, 188, 109, 119, 201, 186, 114, 82)_{G10},
 (89, 124, 42, 58, 189, 93, 107, 191, 13, 131, 14, 88,
 113, 128, 197, 104, 59, 33, 194, 76, 123, 49, 86, 203)_{G10},
 (9, 102, 44, 114, 163, 13, 27, 182, 57, 127, 159, 152,
 119, 175, 28, 191, 36, 117, 151, 146, 132, 54, 49, 7)_{G11},
 (10, 103, 45, 115, 164, 14, 28, 185, 58, 128, 160, 153,
 120, 176, 29, 194, 37, 118, 152, 147, 133, 55, 50, 8)_{G11},
 (11, 104, 46, 116, 165, 15, 29, 188, 59, 129, 161, 154,
 121, 177, 30, 197, 38, 119, 153, 148, 134, 56, 51, 9)_{G11},
 (12, 105, 47, 117, 166, 16, 30, 191, 60, 130, 162, 155,
 122, 178, 31, 200, 39, 120, 154, 149, 135, 57, 52, 10)_{G11},
 (1, 163, 185, 151, 41, 79, 42, 112, 32, 70, 132, 158,
 153, 169, 47, 23, 117, 96, 9, 120, 76, 93, 205, 184)_{G11},
 (2, 164, 188, 152, 42, 80, 43, 113, 33, 71, 133, 159,
 154, 170, 48, 24, 118, 97, 10, 121, 77, 94, 181, 187)_{G11},
 (3, 165, 191, 153, 43, 81, 44, 114, 34, 72, 134, 160,
 155, 171, 49, 25, 119, 98, 11, 122, 78, 95, 184, 190)_{G11},
 (4, 166, 194, 154, 44, 82, 45, 115, 35, 73, 135, 161,
 156, 172, 50, 26, 120, 99, 12, 123, 79, 96, 187, 193)_{G11},
 (159, 122, 99, 65, 133, 81, 157, 74, 108, 180, 193, 120,
 183, 204, 83, 123, 112, 201, 85, 102, 6, 53, 189, 71)_{G11},
 (126, 187, 123, 181, 11, 137, 86, 62, 124, 97, 30, 129,
 158, 127, 204, 36, 131, 195, 64, 85, 196, 116, 105, 82)_{G11},
 (140, 3, 33, 61, 186, 201, 128, 58, 64, 68, 136, 79,
 204, 160, 189, 43, 75, 0, 134, 113, 123, 30, 180, 82)_{G11},
 (34, 13, 111, 153, 164, 0, 8, 189, 98, 27, 51, 205,
 35, 190, 16, 46, 147, 75, 188, 183, 63, 103, 132, 128)_{G12},
 (35, 14, 112, 154, 165, 1, 9, 192, 99, 28, 52, 181,
 36, 193, 17, 47, 148, 76, 191, 186, 64, 104, 133, 129)_{G12},
 (36, 15, 113, 155, 166, 2, 10, 195, 100, 29, 53, 184,
 37, 196, 18, 48, 149, 77, 194, 189, 65, 105, 134, 130)_{G12},
 (37, 16, 114, 156, 167, 3, 11, 198, 101, 30, 54, 187,
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 (66, 57, 173, 179, 58, 192, 73, 69, 27, 129, 134, 116,
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 (67, 58, 174, 144, 59, 195, 74, 70, 28, 130, 135, 117,
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 (71, 16, 144, 153, 19, 39, 92, 108, 58, 64, 147, 155,
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 26, 56, 126, 118, 206, 57, 203, 144, 9, 49, 0, 32) $_{G_{12}}$,
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 198, 186, 194, 43, 72, 100, 56, 129, 117, 48, 148, 154) $_{G_{13}}$,
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 (23, 166, 12, 152, 17, 143, 204, 19, 42, 40, 171, 74,
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 38, 193, 70, 79, 5, 184, 113, 136, 12, 172, 10, 199) $_{G16}$,
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 158, 150, 74, 156, 40, 96, 13, 91, 131, 142, 55, 159) $_{G22}$,
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 87, 113, 167, 152, 27, 122, 186, 136, 119, 64, 124, 37) $_{G_{24}}$,
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 88, 114, 168, 153, 28, 123, 189, 137, 120, 65, 125, 38) $_{G_{24}}$,
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 89, 115, 169, 154, 29, 124, 192, 138, 121, 66, 126, 39) $_{G_{24}}$,
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 42, 197, 15, 10, 85, 178, 51, 88, 58, 177, 132, 27) $_{G_{25}}$,
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 43, 200, 16, 11, 86, 179, 52, 89, 59, 178, 133, 28) $_{G_{25}}$,
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 44, 203, 17, 12, 87, 144, 53, 90, 60, 179, 134, 29) $_{G_{25}}$,
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 45, 206, 18, 13, 88, 145, 54, 91, 61, 144, 135, 30) $_{G_{25}}$,
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 155, 194, 179, 97, 109, 90, 6, 38, 49, 42, 55, 192) $_{G_{25}}$,
 (141, 203, 153, 164, 16, 58, 121, 6, 135, 64, 127, 145,
 156, 197, 144, 98, 110, 91, 7, 39, 50, 43, 56, 195) $_{G_{25}}$,
 (142, 206, 154, 165, 17, 59, 122, 7, 136, 65, 128, 146,
 157, 200, 145, 99, 111, 92, 8, 40, 51, 44, 57, 198) $_{G_{25}}$,
 (143, 182, 155, 166, 18, 60, 123, 8, 137, 66, 129, 147,
 158, 203, 146, 100, 112, 93, 9, 41, 52, 45, 58, 201) $_{G_{25}}$,
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 122, 126, 94, 109, 104, 49, 187, 19, 35, 156, 70, 201) $_{G_{25}}$,
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 108, 193, 32, 27, 122, 77, 205, 117, 13, 183, 56, 58) $_{G_{25}}$,
 (157, 107, 95, 19, 124, 130, 202, 140, 192, 142, 167, 186,
 33, 189, 43, 29, 31, 24, 66, 36, 204, 14, 47, 3) $_{G_{25}}$,
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 153, 110, 185, 179, 3, 11, 26, 137, 113, 126, 161, 145) $_{G_{26}}$,

(193, 102, 31, 6, 197, 189, 92, 124, 59, 37, 32, 141,
 154, 111, 188, 144, 4, 12, 27, 138, 114, 127, 162, 146) $_{G26}$,
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 155, 112, 191, 145, 5, 13, 28, 139, 115, 128, 163, 147) $_{G26}$,
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 156, 113, 194, 146, 6, 14, 29, 140, 116, 129, 164, 148) $_{G26}$,
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 5, 7, 98, 108, 206, 56, 22, 198, 202, 149, 55, 59) $_{G26}$,
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 79, 147, 155, 60, 42, 16, 175, 119, 8, 65, 152, 153) $_{G26}$,
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 113, 85, 174, 120, 169, 130, 18, 160, 136, 148, 33, 57) $_{G26}$,
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 46, 9, 149, 178, 92, 166, 55, 14, 98, 42, 33, 87) $_{G26}$,
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 73, 139, 178, 169, 174, 167, 128, 108, 58, 25, 35, 148) $_{G27}$,
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 74, 140, 179, 170, 175, 168, 129, 109, 59, 26, 36, 149) $_{G27}$,
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 75, 141, 144, 171, 176, 169, 130, 110, 60, 27, 37, 150) $_{G27}$,
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 76, 142, 145, 172, 177, 170, 131, 111, 61, 28, 38, 151) $_{G27}$,
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 92, 96, 13, 45, 163, 143, 65, 192, 149, 170, 2, 112) $_{G27}$,
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 64, 44, 122, 188, 11, 113, 203, 79, 183, 80, 130, 37) $_{G27}$,

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 0, 178, 172, 156, 60, 154, 162, 33, 45, 114, 170, 24) $_{G28}$,
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 181, 94, 95, 175, 47, 102, 100, 59, 22, 111, 188, 196) $_{G28}$,
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 184, 95, 96, 176, 48, 103, 101, 60, 23, 112, 191, 199) $_{G28}$,
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 96, 36, 204, 52, 91, 37, 191, 9, 102, 125, 196, 110) $_{G29}$,
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 97, 37, 180, 53, 92, 38, 194, 10, 103, 126, 199, 111) $_{G29}$,
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and

(22, 158, 198, 144, 115, 24, 140, 134, 88, 108, 155, 125,
 169, 189, 121, 13, 171, 10, 184, 96, 20, 81, 170, 132) $_{G38}$,
 (23, 159, 201, 145, 116, 25, 141, 135, 89, 109, 156, 126,
 170, 192, 122, 14, 172, 11, 187, 97, 21, 82, 171, 133) $_{G38}$,
 (24, 160, 204, 146, 117, 26, 142, 136, 90, 110, 157, 127,
 171, 195, 123, 15, 173, 12, 190, 98, 22, 83, 172, 134) $_{G38}$,
 (25, 161, 180, 147, 118, 27, 143, 137, 91, 111, 158, 128,
 172, 198, 124, 16, 174, 13, 193, 99, 23, 84, 173, 135) $_{G38}$,
 (152, 47, 55, 64, 196, 12, 14, 72, 135, 11, 151, 168,
 186, 179, 162, 94, 8, 3, 66, 77, 83, 134, 116, 75) $_{G38}$,
 (153, 48, 56, 65, 199, 13, 15, 73, 136, 12, 152, 169,
 189, 144, 163, 95, 9, 4, 67, 78, 84, 135, 117, 76) $_{G38}$,
 (154, 49, 57, 66, 202, 14, 16, 74, 137, 13, 153, 170,
 192, 145, 164, 96, 10, 5, 68, 79, 85, 136, 118, 77) $_{G38}$,
 (155, 50, 58, 67, 205, 15, 17, 75, 138, 14, 154, 171,
 195, 146, 165, 97, 11, 6, 69, 80, 86, 137, 119, 78) $_{G38}$,
 (80, 57, 203, 199, 182, 78, 105, 68, 70, 95, 194, 33,
 193, 91, 37, 58, 32, 87, 14, 200, 59, 110, 106, 13) $_{G38}$,
 (145, 51, 5, 134, 32, 116, 199, 104, 97, 166, 194, 53,
 52, 188, 67, 83, 0, 89, 185, 172, 197, 78, 68, 47) $_{G38}$,
 (93, 38, 24, 72, 103, 127, 182, 179, 194, 185, 28, 197,
 30, 39, 13, 29, 70, 7, 94, 61, 184, 108, 126, 139) $_{G38}$

under the action of the mapping $x \mapsto x + 4 \pmod{144}$ for $x < 144$, $x \mapsto 144 + (x + 4 \pmod{36})$ for $144 \leq x < 180$, $x \mapsto 180 + (x - 180 + 12 \pmod{27})$ for $x \geq 180$.

Let the vertex set of $K_{24,24,24,24}$ be Z_{96} partitioned according to residue classes modulo 4. The decompositions consist of

(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 30, 39,
 29, 50, 5, 66, 51, 91, 62, 19, 8, 82, 32, 53) $_{G1}$,
 (0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 30, 26,
 35, 56, 51, 4, 64, 14, 90, 45, 27, 11, 60, 72) $_{G2}$,

$(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 30, 26,$
 $35, 42, 51, 4, 8, 69, 71, 12, 5, 63, 59, 28)_{G3},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 30, 26,$
 $35, 42, 51, 52, 81, 77, 5, 8, 75, 89, 24, 54)_{G4},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 39,$
 $29, 50, 43, 68, 56, 4, 77, 26, 18, 91, 34, 67)_{G5},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 39,$
 $29, 50, 42, 62, 56, 4, 80, 27, 15, 90, 41, 57)_{G6},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 39,$
 $29, 42, 47, 64, 63, 94, 4, 71, 69, 19, 28, 61)_{G7},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 39,$
 $29, 42, 47, 46, 84, 62, 90, 8, 65, 10, 15, 51)_{G8},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 39,$
 $29, 42, 43, 64, 70, 63, 94, 4, 72, 14, 9, 55)_{G9},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 26,$
 $35, 42, 51, 43, 72, 85, 82, 78, 12, 4, 37, 39)_{G10},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 26,$
 $35, 42, 51, 57, 66, 95, 65, 90, 88, 68, 14, 27)_{G11},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 26,$
 $35, 42, 43, 51, 86, 77, 94, 76, 72, 9, 48, 23)_{G12},$
 $(0, 1, 2, 3, 6, 7, 13, 16, 21, 20, 17, 26,$
 $35, 42, 49, 45, 75, 82, 62, 90, 5, 64, 11, 40)_{G13},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 25, 24,$
 $37, 5, 47, 54, 86, 56, 84, 23, 87, 44, 29, 90)_{G14},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 25, 24,$
 $30, 46, 50, 47, 73, 63, 88, 8, 76, 22, 26, 57)_{G15},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 25, 24,$
 $30, 51, 50, 74, 53, 68, 93, 15, 14, 84, 38, 48)_{G16},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 25, 24,$
 $30, 37, 50, 79, 71, 57, 95, 87, 72, 20, 14, 54)_{G17},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 25, 24,$
 $30, 37, 50, 52, 87, 64, 89, 94, 60, 5, 22, 48)_{G18},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 25, 24,$
 $30, 37, 5, 63, 66, 91, 80, 93, 32, 50, 19, 54)_{G19},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 40, 54, 75, 58, 81, 94, 14, 12, 20, 51, 55)_{G20},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 40, 54, 45, 79, 56, 86, 15, 90, 80, 37, 52)_{G21},$

$(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 40, 50, 42, 54, 67, 94, 12, 95, 77, 20, 49)_{G22},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 40, 50, 42, 67, 4, 73, 19, 8, 77, 26, 58)_{G23},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 40, 49, 56, 65, 50, 85, 18, 88, 23, 35, 77)_{G24},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 30, 50, 51, 57, 86, 89, 83, 81, 20, 47, 36)_{G25},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 30, 50, 51, 73, 61, 8, 65, 77, 94, 32, 19)_{G26},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 30, 50, 42, 57, 55, 95, 72, 91, 5, 29, 44)_{G27},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $34, 30, 50, 42, 67, 57, 61, 87, 80, 88, 33, 19)_{G28},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $40, 29, 37, 58, 73, 93, 52, 90, 59, 95, 19, 45)_{G29},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $40, 29, 50, 51, 46, 78, 5, 84, 8, 77, 31, 45)_{G30},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $40, 29, 50, 51, 77, 87, 79, 56, 91, 42, 33, 5)_{G31},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $40, 29, 50, 51, 52, 54, 89, 80, 88, 87, 30, 34)_{G32},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $40, 29, 50, 51, 43, 61, 81, 67, 25, 10, 78, 31)_{G33},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $40, 29, 37, 5, 55, 75, 57, 94, 72, 15, 64, 17)_{G34},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $29, 30, 50, 51, 56, 69, 73, 93, 82, 18, 40, 23)_{G35},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 28, 21, 24,$
 $29, 30, 50, 51, 52, 67, 74, 91, 77, 5, 38, 32)_{G36},$
 $(0, 1, 2, 3, 6, 7, 13, 11, 16, 17, 22, 24,$
 $31, 37, 30, 44, 40, 65, 69, 54, 94, 92, 89, 27)_{G37}$

and

$(0, 1, 2, 3, 6, 7, 13, 11, 16, 17, 22, 24,$
 $31, 37, 30, 51, 48, 73, 71, 87, 90, 64, 52, 18)_{G38}$

under the action of the mapping $x \mapsto x + 1 \pmod{96}$.

Let the vertex set of $K_{24,24,24,21}$ be $\{0, 1, \dots, 92\}$ partitioned into $\{2j+i : j = 0, 1, \dots, 23\}$, $i = 0, 1, 2$, and $\{72, 73, \dots, 92\}$. The decompositions consist of

(64, 66, 24, 42, 61, 77, 65, 53, 35, 49, 69, 18,
 13, 0, 80, 56, 2, 17, 50, 10, 55, 27, 79, 36)_{G1},
 (85, 5, 22, 30, 16, 87, 90, 2, 72, 53, 4, 45,
 21, 19, 84, 23, 49, 82, 42, 66, 56, 62, 34, 52)_{G1},
 (75, 31, 46, 29, 3, 87, 76, 59, 90, 89, 10, 40,
 86, 13, 12, 78, 56, 42, 73, 5, 67, 63, 25, 81)_{G1},
 (52, 86, 11, 83, 10, 41, 77, 43, 51, 58, 42, 20,
 29, 82, 32, 48, 55, 44, 31, 38, 35, 85, 39, 81)_{G1},
 (36, 16, 74, 23, 24, 88, 71, 5, 61, 39, 38, 49,
 4, 26, 15, 44, 29, 66, 32, 78, 84, 45, 55, 31)_{G1},
 (63, 62, 44, 26, 79, 72, 61, 25, 15, 13, 27, 77,
 18, 28, 42, 17, 59, 24, 84, 81, 7, 33, 35, 8)_{G2},
 (9, 65, 56, 68, 60, 33, 75, 22, 80, 43, 14, 63,
 36, 16, 5, 70, 46, 86, 90, 81, 24, 27, 44, 1)_{G2},
 (76, 11, 2, 44, 6, 90, 80, 1, 52, 18, 38, 10,
 87, 53, 41, 74, 39, 57, 48, 8, 85, 49, 78, 22)_{G2},
 (74, 67, 24, 27, 45, 11, 89, 13, 65, 68, 39, 31,
 21, 75, 36, 80, 90, 38, 59, 5, 51, 30, 85, 55)_{G2},
 (53, 24, 9, 58, 68, 59, 85, 77, 66, 62, 34, 7,
 10, 32, 30, 47, 75, 84, 72, 1, 43, 18, 16, 36)_{G2},
 (39, 86, 52, 87, 7, 25, 54, 36, 65, 43, 38, 53,
 46, 16, 48, 85, 6, 63, 44, 14, 89, 10, 64, 90)_{G3},
 (19, 0, 3, 56, 78, 25, 65, 89, 15, 36, 91, 12,
 43, 50, 4, 41, 2, 32, 6, 7, 47, 45, 84, 70)_{G3},
 (48, 88, 65, 26, 5, 61, 43, 9, 90, 49, 35, 15,
 7, 28, 11, 81, 18, 82, 79, 41, 70, 24, 80, 14)_{G3},
 (39, 74, 40, 58, 1, 54, 63, 84, 82, 21, 28, 23,
 5, 64, 86, 76, 45, 83, 80, 50, 16, 17, 78, 43)_{G3},
 (42, 22, 87, 26, 53, 41, 16, 0, 86, 21, 49, 81,
 68, 12, 38, 6, 51, 3, 84, 85, 39, 17, 59, 10)_{G3},
 (59, 75, 83, 46, 32, 5, 60, 21, 78, 47, 77, 8,
 81, 39, 82, 4, 74, 25, 67, 50, 71, 38, 66, 15)_{G4},
 (11, 48, 16, 61, 26, 74, 76, 59, 6, 9, 62, 58,
 78, 32, 79, 36, 72, 60, 69, 87, 73, 29, 2, 7)_{G4},
 (16, 47, 17, 20, 9, 31, 46, 3, 43, 52, 33, 24,
 56, 82, 41, 87, 14, 63, 85, 1, 29, 49, 22, 45)_{G4},
 (89, 14, 68, 22, 7, 10, 77, 54, 83, 17, 63, 2,
 78, 15, 19, 52, 84, 50, 43, 1, 79, 62, 49, 60)_{G4},
 (84, 70, 17, 55, 23, 14, 48, 81, 80, 56, 54, 1,
 47, 26, 33, 65, 36, 39, 79, 13, 60, 90, 52, 8)_{G4},
 (37, 78, 45, 41, 35, 16, 74, 72, 81, 48, 69, 22,
 26, 60, 85, 34, 39, 90, 4, 76, 73, 32, 51, 14)_{G5},

(12, 56, 35, 14, 13, 25, 76, 39, 69, 31, 5, 33,
 84, 7, 15, 67, 1, 50, 79, 8, 23, 66, 19, 28)_{G5},
 (6, 70, 75, 85, 9, 3, 44, 67, 62, 11, 22, 89,
 35, 46, 40, 81, 42, 47, 30, 69, 2, 8, 73, 64)_{G5},
 (4, 29, 30, 74, 61, 84, 72, 26, 15, 50, 40, 0,
 13, 59, 79, 36, 85, 80, 33, 73, 67, 45, 2, 17)_{G5},
 (2, 39, 1, 22, 4, 62, 3, 91, 17, 75, 48, 64,
 24, 16, 35, 84, 76, 33, 49, 54, 15, 5, 82, 56)_{G5},
 (23, 84, 82, 72, 61, 27, 39, 34, 2, 4, 71, 62,
 78, 60, 90, 86, 38, 5, 48, 66, 28, 67, 87, 74)_{G6},
 (13, 30, 59, 89, 40, 50, 79, 28, 32, 47, 18, 45,
 44, 37, 80, 29, 15, 69, 48, 33, 81, 88, 35, 62)_{G6},
 (22, 35, 59, 84, 55, 51, 78, 40, 20, 18, 90, 44,
 63, 1, 53, 42, 29, 77, 52, 61, 27, 79, 12, 17)_{G6},
 (88, 8, 10, 41, 77, 45, 15, 32, 46, 49, 22, 73,
 58, 62, 3, 30, 24, 61, 67, 64, 53, 20, 9, 78)_{G6},
 (26, 51, 70, 76, 52, 11, 75, 15, 47, 0, 42, 49,
 65, 92, 82, 87, 34, 50, 1, 56, 32, 9, 90, 39)_{G6},
 (44, 66, 72, 16, 61, 38, 53, 9, 63, 54, 85, 22,
 88, 65, 67, 32, 4, 50, 3, 89, 76, 12, 69, 84)_{G7},
 (15, 7, 83, 41, 30, 68, 38, 0, 76, 12, 45, 73,
 50, 61, 35, 13, 87, 3, 42, 77, 48, 89, 17, 47)_{G7},
 (2, 77, 6, 18, 48, 42, 64, 8, 88, 44, 65, 73,
 89, 71, 7, 31, 58, 54, 51, 37, 0, 72, 85, 11)_{G7},
 (82, 0, 15, 71, 43, 58, 80, 32, 21, 52, 47, 57,
 64, 34, 85, 10, 17, 2, 3, 86, 65, 88, 45, 19)_{G7},
 (29, 91, 30, 25, 15, 0, 11, 37, 88, 8, 31, 10,
 24, 68, 79, 92, 5, 19, 4, 83, 14, 49, 66, 65)_{G7},
 (39, 29, 78, 88, 67, 69, 8, 46, 17, 14, 75, 83,
 0, 85, 66, 61, 41, 62, 23, 27, 16, 52, 33, 74)_{G8},
 (84, 67, 45, 46, 21, 54, 34, 32, 5, 15, 58, 90,
 82, 80, 14, 88, 25, 63, 60, 38, 20, 79, 16, 43)_{G8},
 (79, 44, 33, 10, 13, 76, 8, 23, 17, 74, 30, 24,
 51, 73, 49, 84, 32, 62, 29, 43, 66, 12, 64, 75)_{G8},
 (12, 47, 72, 7, 87, 90, 19, 56, 8, 82, 17, 2,
 15, 66, 18, 25, 84, 53, 68, 78, 40, 11, 51, 69)_{G8},
 (54, 49, 62, 22, 80, 56, 6, 37, 60, 12, 33, 55,
 77, 92, 50, 19, 23, 47, 32, 63, 10, 72, 39, 61)_{G8},
 (63, 40, 83, 65, 0, 62, 41, 7, 74, 37, 19, 79,
 76, 39, 89, 50, 6, 21, 56, 61, 77, 24, 16, 81)_{G9},
 (33, 35, 83, 44, 43, 3, 54, 50, 85, 21, 10, 29,
 61, 65, 14, 87, 48, 24, 51, 70, 31, 12, 32, 41)_{G9},

(77, 45, 6, 1, 88, 79, 46, 22, 18, 69, 64, 89,
 23, 32, 87, 20, 11, 27, 49, 72, 30, 55, 84, 71)_{G9},
 (4, 59, 54, 83, 1, 16, 50, 85, 20, 22, 11, 9,
 36, 40, 8, 78, 39, 23, 61, 80, 44, 55, 75, 48)_{G9},
 (79, 32, 35, 30, 43, 25, 9, 82, 38, 91, 87, 8,
 10, 66, 37, 18, 2, 81, 85, 47, 14, 17, 51, 33)_{G9},
 (71, 16, 90, 37, 48, 82, 29, 56, 84, 47, 43, 74,
 52, 51, 36, 34, 45, 69, 89, 30, 67, 59, 70, 78)_{G10},
 (21, 62, 13, 73, 34, 30, 74, 90, 17, 54, 23, 26,
 19, 83, 80, 49, 51, 79, 50, 44, 58, 18, 85, 0)_{G10},
 (62, 84, 72, 39, 40, 23, 63, 37, 73, 52, 22, 88,
 60, 32, 2, 65, 24, 64, 86, 53, 51, 21, 14, 80)_{G10},
 (20, 81, 25, 49, 43, 27, 86, 78, 29, 24, 5, 32,
 56, 13, 67, 4, 18, 76, 66, 48, 75, 91, 71, 7)_{G10},
 (64, 85, 48, 29, 8, 69, 10, 43, 7, 89, 52, 84,
 23, 42, 6, 61, 18, 65, 57, 63, 38, 59, 34, 37)_{G10},
 (42, 72, 34, 10, 8, 29, 9, 85, 60, 53, 21, 67,
 0, 81, 86, 64, 65, 3, 41, 70, 19, 47, 48, 77)_{G11},
 (8, 31, 4, 37, 51, 65, 29, 84, 26, 75, 73, 74,
 68, 22, 45, 12, 28, 2, 33, 85, 78, 66, 47, 59)_{G11},
 (33, 90, 59, 87, 27, 36, 82, 31, 52, 18, 17, 68,
 85, 79, 13, 55, 66, 88, 69, 4, 71, 42, 62, 89)_{G11},
 (60, 20, 65, 14, 3, 69, 13, 10, 87, 73, 34, 53,
 26, 44, 51, 11, 89, 37, 67, 48, 79, 76, 27, 62)_{G11},
 (12, 4, 25, 46, 23, 11, 66, 6, 91, 84, 22, 64,
 74, 41, 36, 39, 76, 35, 16, 1, 3, 90, 26, 2)_{G11},
 (1, 6, 3, 26, 32, 49, 81, 5, 73, 15, 56, 35,
 67, 48, 80, 90, 42, 9, 47, 36, 86, 28, 82, 25)_{G12},
 (53, 85, 76, 46, 23, 28, 9, 62, 42, 63, 71, 90,
 86, 50, 84, 31, 21, 12, 17, 68, 80, 10, 88, 25)_{G12},
 (53, 91, 4, 0, 66, 8, 78, 27, 85, 26, 25, 65,
 41, 31, 88, 60, 47, 40, 54, 30, 2, 35, 70, 77)_{G12},
 (11, 55, 88, 4, 14, 39, 42, 44, 90, 6, 79, 86,
 54, 32, 5, 28, 18, 51, 67, 89, 33, 43, 68, 13)_{G12},
 (67, 66, 73, 32, 19, 29, 27, 6, 36, 0, 10, 75,
 92, 52, 82, 28, 65, 49, 43, 17, 50, 21, 84, 9)_{G12},
 (9, 8, 20, 64, 48, 46, 88, 73, 84, 36, 5, 54,
 7, 66, 35, 61, 83, 87, 53, 30, 89, 22, 69, 67)_{G13},
 (36, 13, 76, 44, 48, 20, 71, 7, 78, 51, 84, 70,
 62, 4, 86, 16, 59, 55, 91, 40, 6, 14, 57, 82)_{G13},
 (37, 75, 9, 30, 43, 8, 71, 80, 81, 40, 82, 60,
 58, 47, 86, 54, 22, 69, 72, 21, 0, 31, 53, 16)_{G13},

(43, 79, 30, 91, 1, 22, 71, 85, 41, 37, 2, 33,
 39, 88, 50, 23, 4, 7, 5, 65, 9, 67, 27, 78)_{G13},
 (28, 24, 80, 14, 4, 55, 54, 41, 30, 83, 3, 65,
 74, 92, 46, 68, 76, 50, 8, 6, 21, 71, 63, 1)_{G13},
 (57, 61, 14, 86, 56, 84, 66, 54, 63, 19, 71, 24,
 1, 47, 58, 37, 88, 48, 62, 60, 68, 18, 76, 32)_{G14},
 (83, 23, 17, 70, 58, 54, 85, 61, 32, 47, 35, 53,
 69, 67, 25, 28, 2, 89, 41, 72, 11, 49, 27, 68)_{G14},
 (78, 29, 59, 20, 55, 18, 81, 74, 84, 40, 1, 72,
 4, 48, 38, 39, 80, 11, 25, 87, 31, 53, 90, 24)_{G14},
 (90, 54, 41, 24, 86, 11, 10, 77, 17, 82, 6, 52,
 49, 53, 74, 20, 32, 3, 21, 73, 16, 66, 75, 2)_{G14},
 (41, 21, 7, 75, 23, 32, 87, 91, 34, 2, 22, 51,
 6, 4, 38, 53, 64, 71, 78, 46, 92, 35, 60, 39)_{G14},
 (45, 87, 49, 55, 11, 41, 72, 42, 63, 50, 16, 27,
 34, 82, 40, 20, 57, 38, 51, 64, 3, 59, 4, 76)_{G15},
 (28, 23, 79, 32, 34, 51, 50, 61, 69, 74, 75, 20,
 8, 31, 37, 63, 57, 88, 86, 62, 85, 58, 60, 39)_{G15},
 (63, 88, 25, 80, 61, 19, 53, 36, 2, 42, 59, 66,
 73, 24, 11, 89, 56, 16, 84, 14, 22, 91, 17, 0)_{G15},
 (86, 16, 14, 23, 6, 8, 43, 34, 4, 91, 76, 60,
 5, 9, 17, 78, 31, 37, 85, 51, 62, 18, 21, 1)_{G15},
 (77, 22, 66, 29, 80, 56, 59, 26, 9, 88, 85, 49,
 90, 71, 30, 76, 3, 25, 8, 50, 36, 5, 82, 64)_{G15},
 (40, 23, 5, 62, 87, 70, 42, 39, 13, 52, 71, 77,
 79, 24, 38, 88, 30, 64, 31, 33, 17, 81, 36, 85)_{G16},
 (11, 48, 55, 27, 19, 8, 14, 29, 20, 90, 31, 28,
 15, 1, 30, 91, 82, 37, 79, 57, 44, 25, 33, 10)_{G16},
 (79, 32, 23, 14, 6, 84, 78, 91, 58, 43, 40, 71,
 29, 3, 12, 53, 51, 90, 4, 19, 70, 82, 0, 87)_{G16},
 (71, 74, 9, 80, 69, 67, 64, 38, 53, 8, 6, 63,
 3, 83, 55, 19, 65, 26, 75, 79, 10, 13, 18, 41)_{G16},
 (87, 62, 8, 65, 81, 75, 34, 57, 64, 36, 46, 37,
 13, 85, 47, 12, 18, 44, 28, 26, 22, 25, 90, 78)_{G16},
 (9, 65, 73, 32, 13, 24, 71, 37, 86, 88, 8, 56,
 0, 50, 58, 18, 28, 70, 91, 77, 25, 83, 21, 57)_{G17},
 (61, 53, 79, 27, 46, 34, 0, 56, 20, 67, 75, 23,
 39, 40, 30, 50, 9, 83, 8, 2, 91, 81, 59, 51)_{G17},
 (84, 3, 47, 70, 86, 75, 19, 78, 57, 11, 6, 23,
 55, 62, 27, 73, 43, 79, 44, 54, 45, 24, 14, 10)_{G17},
 (21, 75, 43, 80, 5, 13, 83, 38, 6, 20, 39, 74,
 60, 31, 42, 87, 33, 78, 85, 57, 50, 52, 61, 44)_{G17},

(27, 65, 17, 4, 33, 90, 28, 15, 8, 3, 52, 38,
 70, 74, 34, 69, 9, 54, 56, 64, 43, 71, 85, 82)_{G17},
 (85, 15, 18, 12, 89, 47, 25, 16, 10, 2, 74, 37,
 62, 68, 86, 44, 72, 77, 4, 52, 79, 19, 7, 24)_{G18},
 (87, 11, 55, 20, 24, 70, 41, 50, 82, 39, 69, 63,
 37, 67, 10, 34, 59, 36, 9, 17, 47, 66, 58, 88)_{G18},
 (79, 61, 2, 18, 50, 76, 46, 73, 67, 26, 66, 47,
 41, 23, 63, 77, 57, 15, 70, 52, 81, 37, 7, 60)_{G18},
 (16, 48, 27, 82, 7, 90, 76, 84, 5, 14, 52, 1,
 38, 89, 9, 3, 41, 0, 60, 26, 67, 87, 78, 64)_{G18},
 (1, 83, 42, 68, 50, 52, 25, 81, 85, 9, 45, 35,
 28, 70, 92, 49, 91, 53, 69, 39, 73, 29, 16, 40)_{G18},
 (64, 91, 84, 57, 9, 24, 11, 46, 4, 76, 80, 19,
 17, 12, 70, 14, 29, 6, 49, 63, 75, 44, 18, 23)_{G19},
 (59, 18, 63, 83, 52, 34, 73, 56, 0, 29, 12, 15,
 13, 35, 76, 72, 44, 14, 91, 6, 28, 36, 67, 85)_{G19},
 (47, 58, 9, 25, 91, 48, 29, 22, 6, 80, 89, 52,
 82, 20, 40, 21, 5, 12, 19, 35, 30, 88, 33, 79)_{G19},
 (81, 40, 39, 31, 82, 29, 61, 34, 48, 78, 27, 16,
 14, 67, 57, 87, 33, 3, 79, 46, 41, 85, 56, 88)_{G19},
 (86, 61, 45, 41, 38, 66, 81, 7, 37, 58, 68, 70,
 42, 63, 44, 43, 6, 23, 76, 71, 78, 13, 50, 15)_{G19},
 (12, 5, 58, 25, 60, 76, 41, 85, 72, 82, 70, 24,
 66, 59, 62, 4, 84, 26, 87, 0, 3, 32, 75, 38)_{G20},
 (67, 68, 23, 5, 63, 78, 16, 69, 91, 0, 13, 21,
 35, 81, 83, 7, 79, 76, 28, 59, 26, 56, 6, 88)_{G20},
 (65, 67, 18, 87, 26, 76, 64, 53, 54, 21, 49, 28,
 13, 30, 29, 51, 74, 59, 55, 11, 25, 71, 66, 0)_{G20},
 (29, 60, 73, 52, 89, 80, 26, 11, 15, 85, 56, 59,
 19, 70, 3, 86, 0, 74, 77, 64, 10, 61, 62, 66)_{G20},
 (63, 79, 62, 75, 66, 49, 1, 12, 53, 71, 65, 92,
 77, 43, 28, 36, 35, 2, 29, 68, 6, 25, 69, 58)_{G20},
 (23, 27, 52, 82, 61, 44, 42, 56, 41, 43, 81, 80,
 64, 9, 11, 13, 59, 51, 16, 57, 62, 53, 45, 7)_{G21},
 (77, 61, 71, 66, 84, 73, 69, 88, 7, 10, 29, 23,
 33, 46, 18, 74, 28, 49, 60, 11, 8, 30, 78, 87)_{G21},
 (38, 87, 1, 36, 10, 66, 90, 82, 53, 67, 28, 16,
 52, 60, 42, 14, 75, 17, 86, 84, 58, 64, 2, 23)_{G21},
 (25, 89, 26, 20, 38, 66, 58, 22, 72, 83, 23, 32,
 29, 48, 37, 76, 13, 19, 47, 71, 3, 60, 85, 78)_{G21},
 (2, 7, 81, 79, 0, 71, 13, 16, 19, 41, 22, 61,
 68, 77, 78, 59, 76, 24, 8, 14, 72, 9, 34, 55)_{G21},

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 40, 19, 38, 34, 49, 60, 5, 48, 3, 83, 2, 55)_{G22},
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 47, 43, 63, 86, 31, 91, 41, 52, 56, 2, 69, 80)_{G22},
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 22, 84, 82, 28, 75, 18, 52, 24, 38, 5, 67, 81)_{G22},
 (31, 8, 12, 57, 63, 90, 70, 20, 25, 84, 9, 58,
 45, 13, 50, 62, 82, 22, 44, 80, 1, 51, 29, 0)_{G22},
 (6, 4, 22, 74, 65, 86, 78, 60, 1, 16, 15, 47,
 44, 56, 48, 82, 61, 9, 92, 35, 45, 31, 83, 40)_{G22},
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 87, 70, 25, 90, 30, 27, 38, 73, 17, 45, 55, 16)_{G23},
 (30, 2, 53, 82, 48, 22, 16, 12, 32, 26, 91, 6,
 34, 67, 25, 11, 78, 83, 36, 33, 64, 88, 31, 62)_{G23},
 (90, 63, 1, 43, 14, 7, 15, 75, 0, 53, 21, 82,
 65, 23, 40, 77, 22, 61, 86, 20, 29, 55, 32, 88)_{G23},
 (58, 84, 71, 39, 65, 38, 25, 3, 34, 47, 76, 87,
 88, 28, 10, 27, 7, 54, 74, 5, 59, 61, 8, 79)_{G23},
 (43, 80, 65, 2, 45, 36, 10, 60, 28, 24, 61, 40,
 86, 82, 77, 14, 29, 7, 35, 8, 78, 52, 9, 0)_{G23},
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 75, 90, 15, 69, 57, 83, 68, 47, 1, 10, 78, 39)_{G24},
 (86, 57, 14, 20, 5, 73, 39, 75, 77, 85, 46, 25,
 43, 53, 71, 26, 6, 35, 51, 40, 70, 84, 8, 42)_{G24},
 (86, 15, 29, 36, 41, 52, 16, 46, 1, 23, 85, 69,
 76, 30, 43, 38, 88, 65, 58, 39, 57, 33, 35, 34)_{G24},
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 75, 28, 77, 35, 26, 88, 44, 37, 6, 12, 89, 53)_{G24},
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 33, 71, 79, 37, 58, 27, 85, 57, 46, 2, 10, 5)_{G25},
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 9, 31, 42, 82, 44, 58, 68, 91, 32, 48, 87, 60)_{G25},
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 21, 8, 26, 60, 67, 15, 46, 30, 45, 56, 76, 34)_{G25},
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 37, 10, 5, 8, 38, 21, 39, 81, 36, 85, 44, 29)_{G25},
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 28, 81, 71, 37, 79, 78, 89, 8, 67, 42, 43, 51)_{G25},
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 72, 41, 28, 7, 77, 36, 54, 85, 63, 62, 64, 58)_{G26},

(91, 43, 52, 65, 63, 57, 44, 36, 82, 9, 25, 58,
 14, 16, 32, 54, 88, 41, 49, 83, 37, 79, 56, 24)_{G26},
 (41, 72, 31, 83, 36, 3, 8, 77, 43, 54, 2, 32,
 14, 51, 90, 58, 61, 0, 80, 56, 27, 11, 74, 78)_{G26},
 (89, 17, 12, 25, 66, 10, 46, 77, 47, 50, 18, 51,
 58, 41, 88, 37, 14, 49, 0, 55, 36, 11, 73, 90)_{G26},
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 22, 43, 29, 86, 78, 89, 53, 12, 34, 3, 11, 2)_{G26},
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 64, 85, 26, 89, 14, 22, 60, 31, 57, 39, 80, 83)_{G27},
 (61, 21, 12, 18, 84, 49, 26, 28, 37, 16, 85, 56,
 45, 71, 69, 64, 34, 67, 11, 83, 13, 78, 2, 30)_{G27},
 (71, 27, 31, 7, 23, 37, 86, 47, 84, 5, 11, 30,
 16, 46, 74, 61, 83, 79, 53, 73, 44, 59, 64, 89)_{G27},
 (0, 74, 58, 19, 26, 28, 36, 50, 6, 68, 76, 87,
 75, 78, 51, 69, 8, 31, 46, 1, 25, 73, 11, 62)_{G27},
 (30, 17, 25, 2, 67, 48, 26, 75, 42, 31, 4, 37,
 8, 40, 68, 3, 72, 86, 6, 14, 84, 28, 18, 53)_{G27},
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 9, 70, 4, 74, 76, 2, 65, 30, 85, 28, 57, 18)_{G28},
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 42, 83, 71, 3, 24, 35, 14, 55, 18, 1, 75, 13)_{G28},
 (40, 35, 27, 36, 34, 86, 11, 23, 91, 25, 44, 24,
 57, 9, 45, 83, 59, 65, 81, 71, 8, 42, 80, 61)_{G28},
 (86, 18, 51, 5, 89, 91, 22, 82, 49, 12, 23, 16,
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 (66, 88, 34, 1, 36, 23, 71, 59, 87, 27, 30, 81,
 52, 37, 54, 4, 57, 39, 41, 17, 25, 80, 72, 70)_{G29},
 (34, 18, 89, 83, 70, 77, 60, 29, 24, 56, 47, 25,
 39, 15, 72, 67, 80, 75, 55, 37, 42, 17, 71, 90)_{G29},
 (23, 48, 64, 91, 76, 84, 14, 54, 37, 58, 13, 32,
 41, 71, 78, 15, 57, 89, 4, 18, 19, 36, 46, 81)_{G29},
 (71, 16, 76, 87, 17, 84, 58, 55, 40, 56, 26, 35,
 82, 68, 11, 3, 45, 51, 52, 54, 79, 78, 70, 53)_{G29},
 (72, 56, 63, 13, 70, 37, 2, 29, 62, 85, 8, 81,
 36, 64, 78, 46, 28, 65, 33, 26, 39, 44, 48, 61)_{G29},
 (21, 52, 37, 67, 32, 82, 90, 45, 3, 53, 5, 38,
 40, 91, 50, 31, 19, 30, 66, 18, 56, 81, 65, 58)_{G30},
 (50, 77, 72, 86, 63, 21, 41, 67, 44, 43, 40, 70,
 23, 87, 57, 2, 80, 24, 61, 13, 75, 71, 78, 68)_{G30},

(8, 84, 87, 67, 59, 36, 52, 10, 83, 18, 81, 46,
 14, 24, 17, 28, 90, 57, 61, 38, 27, 64, 72, 43)_{G30},
 (39, 49, 59, 83, 69, 30, 85, 81, 20, 26, 52, 86,
 3, 37, 42, 63, 4, 71, 78, 8, 75, 65, 33, 40)_{G30},
 (78, 64, 44, 62, 84, 0, 39, 69, 33, 89, 16, 87,
 14, 38, 31, 17, 23, 42, 21, 27, 30, 10, 81, 59)_{G30},
 (17, 46, 67, 76, 30, 33, 88, 81, 62, 28, 85, 61,
 71, 8, 55, 36, 35, 66, 57, 80, 24, 43, 64, 2)_{G31},
 (29, 90, 75, 13, 69, 26, 23, 18, 62, 80, 6, 16,
 53, 86, 70, 17, 89, 57, 34, 8, 27, 59, 47, 79)_{G31},
 (87, 64, 8, 2, 17, 90, 60, 69, 91, 1, 63, 20,
 38, 49, 9, 65, 88, 70, 43, 48, 31, 50, 42, 84)_{G31},
 (23, 40, 13, 52, 68, 6, 72, 32, 66, 39, 78, 43,
 22, 36, 20, 62, 75, 9, 18, 89, 27, 10, 84, 56)_{G31},
 (34, 48, 76, 88, 78, 71, 35, 27, 1, 33, 84, 55,
 32, 41, 36, 16, 51, 86, 43, 37, 92, 23, 5, 87)_{G31},
 (20, 64, 49, 74, 14, 89, 51, 65, 57, 37, 25, 47,
 63, 78, 40, 82, 18, 86, 85, 42, 58, 62, 8, 66)_{G32},
 (5, 66, 64, 22, 65, 80, 6, 32, 77, 89, 9, 13,
 72, 76, 36, 48, 56, 75, 29, 23, 59, 0, 43, 91)_{G32},
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 25, 40, 6, 7, 78, 84, 90, 11, 14, 27, 55, 46)_{G32},
 (8, 63, 78, 9, 50, 53, 34, 61, 55, 35, 64, 22,
 33, 12, 87, 45, 79, 57, 14, 43, 70, 5, 47, 74)_{G32},
 (21, 91, 53, 87, 58, 62, 83, 90, 6, 11, 15, 4,
 47, 60, 35, 72, 74, 2, 12, 88, 38, 0, 55, 64)_{G32},
 (83, 1, 53, 71, 66, 27, 61, 31, 64, 12, 68, 65,
 79, 30, 38, 22, 52, 10, 42, 74, 2, 63, 76, 41)_{G33},
 (69, 1, 16, 28, 29, 44, 74, 21, 54, 23, 0, 58,
 70, 87, 68, 18, 34, 85, 15, 14, 89, 3, 71, 13)_{G33},
 (68, 60, 13, 28, 84, 80, 66, 29, 17, 90, 35, 69,
 85, 72, 49, 19, 51, 32, 62, 36, 89, 91, 37, 12)_{G33},
 (31, 48, 41, 57, 47, 61, 81, 51, 55, 37, 80, 82,
 7, 13, 84, 36, 38, 35, 3, 50, 75, 22, 49, 79)_{G33},
 (30, 77, 76, 64, 29, 10, 36, 15, 78, 81, 3, 79,
 40, 55, 26, 14, 23, 48, 73, 85, 24, 52, 46, 71)_{G33},
 (41, 57, 63, 36, 86, 55, 31, 35, 11, 85, 3, 73,
 49, 40, 64, 8, 70, 24, 2, 33, 21, 89, 90, 20)_{G34},
 (63, 71, 89, 62, 69, 74, 31, 13, 72, 82, 22, 43,
 66, 90, 46, 1, 60, 14, 84, 48, 41, 9, 20, 37)_{G34},
 (90, 50, 39, 10, 57, 74, 62, 56, 79, 84, 49, 17,
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(57, 49, 13, 34, 2, 85, 78, 65, 45, 17, 70, 71,
 66, 88, 11, 27, 80, 64, 55, 62, 28, 42, 15, 26)_{G34},
 (25, 68, 36, 71, 86, 91, 40, 47, 12, 48, 10, 24,
 66, 30, 58, 89, 44, 34, 78, 22, 90, 23, 0, 43)_{G34},
 (1, 35, 69, 89, 67, 78, 44, 38, 8, 66, 58, 4,
 43, 74, 81, 85, 76, 30, 5, 57, 60, 40, 50, 64)_{G35},
 (3, 10, 58, 78, 59, 5, 24, 47, 45, 43, 55, 66,
 16, 87, 83, 17, 14, 29, 22, 30, 89, 84, 69, 38)_{G35},
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 88, 6, 51, 90, 52, 79, 3, 84, 69, 20, 49, 13)_{G35},
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 29, 54, 1, 51, 42, 86, 72, 50, 14, 68, 48, 0)_{G35},
 (37, 54, 38, 32, 25, 73, 86, 19, 27, 3, 67, 0,
 20, 9, 82, 47, 69, 28, 61, 31, 36, 92, 44, 83)_{G35},
 (34, 20, 18, 27, 43, 9, 29, 47, 87, 52, 61, 49,
 75, 1, 25, 2, 42, 51, 32, 26, 30, 90, 53, 72)_{G36},
 (49, 76, 21, 27, 30, 47, 26, 5, 84, 88, 66, 46,
 85, 91, 20, 1, 32, 59, 71, 4, 63, 40, 72, 90)_{G36},
 (79, 16, 57, 71, 45, 48, 32, 23, 84, 15, 44, 59,
 19, 87, 50, 10, 70, 27, 39, 18, 65, 85, 28, 89)_{G36},
 (14, 3, 76, 78, 81, 47, 28, 5, 29, 8, 91, 61,
 69, 1, 86, 9, 38, 73, 89, 30, 43, 52, 24, 56)_{G36},
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 12, 15, 80, 81, 52, 88, 16, 8, 26, 21, 28, 18)_{G36},
 (2, 51, 7, 64, 26, 28, 66, 9, 89, 77, 68, 76,
 29, 5, 31, 46, 53, 4, 17, 60, 78, 84, 86, 67)_{G37},
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 73, 52, 18, 74, 57, 17, 76, 75, 56, 14, 28, 21)_{G37},
 (20, 21, 36, 7, 67, 2, 83, 64, 68, 53, 72, 80,
 63, 57, 44, 70, 12, 29, 46, 51, 85, 74, 19, 48)_{G37},
 (41, 87, 66, 79, 56, 3, 22, 88, 52, 47, 34, 32,
 59, 26, 10, 84, 39, 75, 91, 54, 15, 46, 53, 5)_{G37},
 (19, 62, 18, 36, 58, 1, 32, 2, 79, 75, 3, 14,
 85, 67, 25, 13, 17, 37, 76, 78, 41, 63, 12, 46)_{G37}
 and
 (14, 76, 86, 66, 49, 45, 39, 52, 89, 88, 79, 50,
 22, 57, 15, 28, 67, 65, 72, 40, 3, 23, 59, 69)_{G38},
 (49, 66, 35, 82, 55, 38, 80, 22, 18, 68, 6, 12,
 62, 53, 77, 73, 78, 13, 61, 2, 48, 91, 16, 3)_{G38},
 (89, 19, 32, 38, 86, 39, 30, 34, 60, 31, 28, 68,
 55, 26, 81, 90, 9, 74, 4, 91, 48, 52, 7, 5)_{G38},

$(38, 22, 25, 15, 88, 41, 57, 91, 37, 80, 33, 69,$
 $73, 71, 46, 17, 6, 53, 83, 32, 28, 66, 85, 35)_{G_{38}},$
 $(58, 76, 62, 36, 60, 39, 1, 63, 8, 40, 31, 7,$
 $56, 64, 85, 35, 27, 75, 33, 78, 25, 57, 26, 4)_{G_{38}}$
 under the action of the mapping $x \mapsto x + 4 \pmod{72}$ for $x < 72$, $x \mapsto$
 $72 + (x - 72 + 7 \pmod{21})$ for $x \geq 72$. \square